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ABSTRACT

This report focuses on demographic and economic changes affecting urban households during the 1980s. Statistics regarding birth, fertility and mortality rates, marriage and divorce, and household formation are presented. Metropolitan and interregional trends in mobility are examined by racial, income and age groups. Growth rates of the national economy and its effect on household income are projected. Also indicated are projected employment levels and the distribution of jobs. The impact of these demographic and income changes on housing demand, education, health, police protection, day care, and aid to families with dependent children is assessed. (Author/APM)

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The Urban Household in the 1980's

A Demographic and Economic Perspective

U.S. DEPARTMENT OF HEALTH,
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THE URBAN HOUSEHOLD IN THE 1980s--
A DEMOGRAPHIC AND ECONOMIC PERSPECTIVE

by

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Prepared for the Department of Housing and Urban Development
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INTRODUCTION

This report which focuses on demographic and economic changes affecting urban households during the 1980s was prepared under the direction of Thomas Muller. Parts I and II of the report discuss demographic changes and shifts in population distribution projected during the 1980s. These sections were prepared by Susan Dujack and Carol Soble. Part III of the report projects growth rates of the national economy and its effect on household income, while Part IV examines the implications of demographic and income changes on the demand of housing, public services, and the role of urban economic development. These sections were prepared by Thomas Muller. The authors are grateful to Copper Wilson for her untiring patience in producing the paper.

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I. DEMOGRAPHIC CHANGES

This section discusses major demographic trends which affect household formation.[1] Projections of the number, type, and size of households are important because the characteristics of households determine housing demand as well as public service needs. To a considerable extent, these features also influence decisions of where within metropolitan areas members of a household decide to live--an issue examined in a subsequent section of this paper.

Among the demographic patterns considered in this study, household formation will have the greatest impact on urban issues in the 1980s. For example, the rapid rate of household formation during the 1970s--the number of new households formed was only slightly below the total population increase--explains why most cities, including those with population losses, required the construction of new housing units to meet the demands of their residents.

Included, too, in this section, is a discussion of related demographic trends such as birth, mortality, marriage and divorce rates. An effort is made to link changes in these trends to the number, type, and size of households. Census Bureau studies are quite useful here since the Bureau has developed several series of household projections based on historical trends and an extrapolation of these observations in order to produce a range of future possibilities. The series selected for use in this study is based upon how well these trends approximate our own findings.

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[1] A household as defined by the Census Bureau includes all persons occupying what counts as a dwelling unit under the 1970 Census rules. The number of households is the same as the number of occupied housing units. A family is a "group of two or more persons residing together who are related by birth, marriage, or adoption." The term household replaces the older term head of house and refers to a designated person within a household in whose name the unit is rented or owned and who serves as the reference point for the relationship of others in the household.

First, some striking characteristics of historical trends are enlightening. The size of the average household has been declining steadily for a number of decades, with the average household size falling from 3.33 in 1960 to 2.81 persons in 1978. At the same time the average family size decreased from 3.67 to 3.33 persons.[1] The number of households has risen sharply during the last two decades from almost 53 million in 1970 to a projected 80 million by 1980. (See Table I-2.) The rate of household formation averaged under 1 million during the 1960s, but was 1.6 million during the latter half of the 1970s. Finally, there has been a change in the type of household. Husband-wife households constitute a decreasing share of all households, and single adult households are accounting for an ever larger share.

1. Birthrates and Fertility Rates

Changes in the birthrate directly affect the size of households and families by affecting the number of children residing in a household. Except for the 10 year interlude of the baby boom following World War II, the birthrate has been declining steadily since the beginning of the century, from a peak of 25 births per 1,000 population in 1955 to around 18 in 1970 and 14 by 1975.[2] The birthrate as shown in Figure I-A appears to be steadying and is not expected to decline further, although neither is it expected to rise significantly within the next one or two decades.[3] Fertility rates, the average number of lifetime births per woman aged 10-45, show a similar pattern. As illustrated in Figure I-B, the fertility rate for all women declined between 1970 and 1975 from 2,434 births per 1,000 women to

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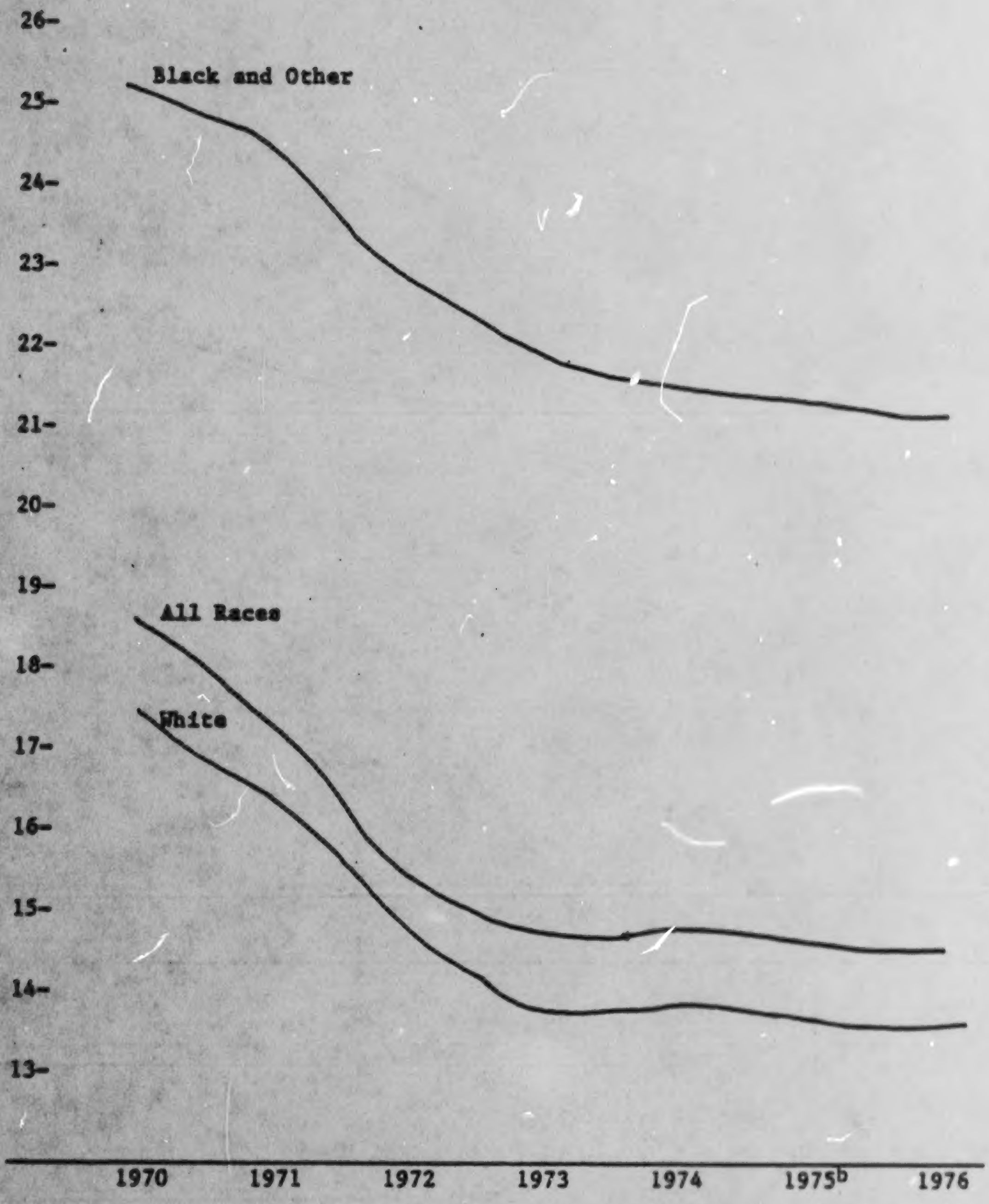
[1] U.S. Bureau of the Cenus, Projections of the Number of Households and Families: 1979 to 1995, P-25, No. 805, May 1979.

[2] Ralph Smith (editor), The Subtle Revolution: Women at Work, The Urban Institute, 1979, p. 127.

[3] Paul Glick, "The Future of the American Family," in Current Population Reports, P-23, No. 78, January 1979.

Figure I-A

BIRTHRATE[a] 1970-1976

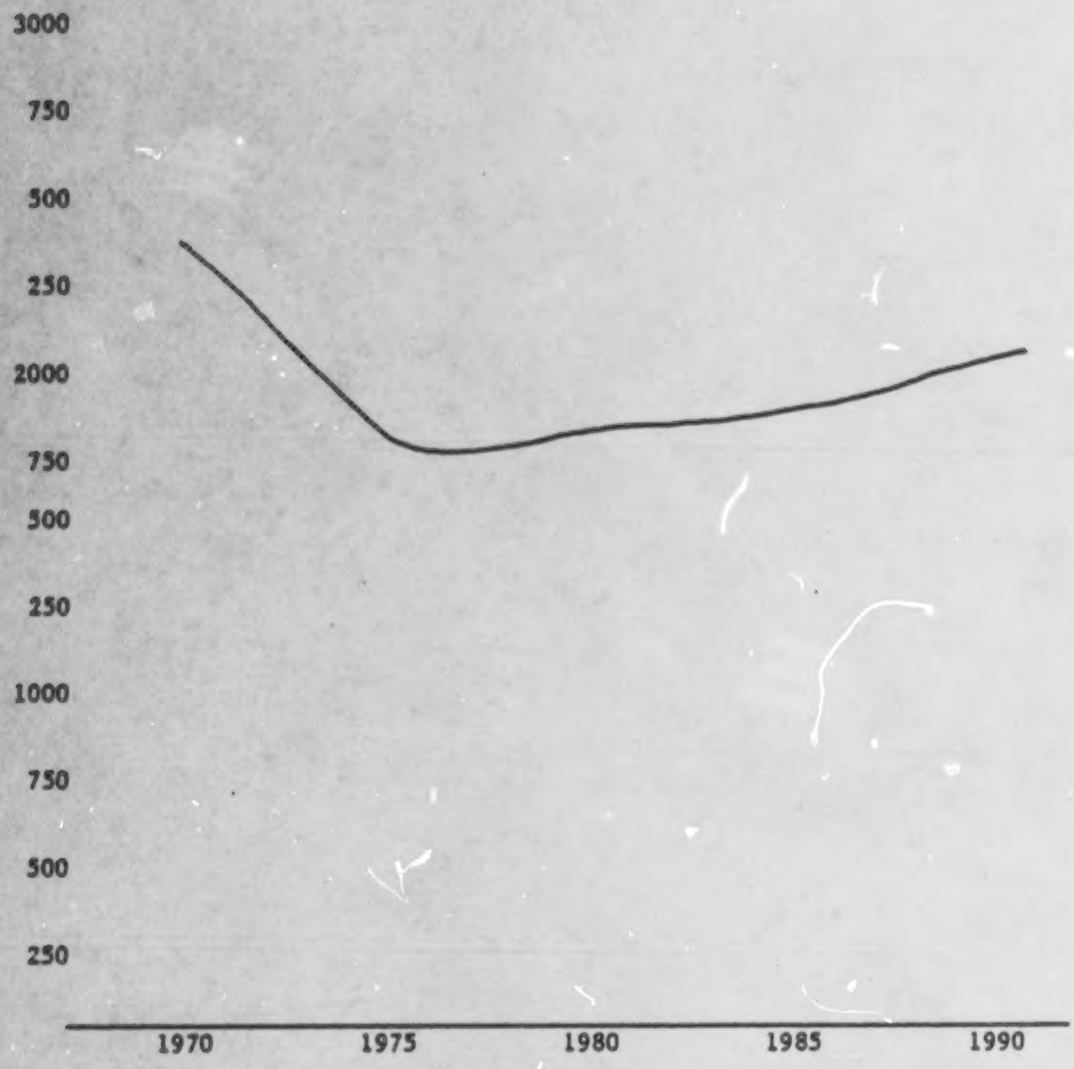


a. rates represent births per 1,000 population

b. The Statistical Abstract incorrectly printed the 1975 rate for all races as 13.8. The correct rate, as shown above, is 14.8.

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1978.

Figure I-B
*Total Fertility Rate 1970-1990[a]
(Series II)



a. Rates represent live births per 1000 women aged 10-49.

Source: U.S. Bureau of the Census, Current Population Reports, P-25, No. 704, July 1977.

1,770.[1] For white women, the rate declined from 2,339 to 1690. The rate of decline for black women was nearly equivalent to that of white women, dropping to 2,135 in 1975 from 2,957 in 1970.

The effects of birthrates alone on the size of households in the 1980s are likely to be rather minor since neither significant increases nor decreases are anticipated. Variations by region are probable as fertility rates have historically been highest in the South for women of both races, but lowest in the Northeast. At present the highest fertility rates are observed in the West. This pattern will contribute to the continuing differences in total population change between the Northeast and the "Sunbelt".

Birthrates alone have practically no effect on the number or type of households except for the unusual case where a married couple breaks away from a larger household unit,[2] or when a single woman bears a child, creating a family where there was formerly a single person household. To the extent that the number of children in a family affects the locational decision of the household, little change can be expected from what should be a fairly steady birthrate.

2. Timing and Spacing of Children

Couples have been postponing marriage and childbearing, and the intervals between marriage and successive children are increasing.[3] Thus, although household formation rates are near their all-time high, the pace of family formation is slower than it was previously.

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[1] U.S. Bureau of the Census, Projections of the Population of the United States: 1974-2050, P-25, No. 704, July 1977.

[2] However, this was not so uncommon immediately after WW II when housing and other shortages necessitated doubling up of families, usually with the parents of one or the other spouse. Paul Glick and Arthur Norton, "What's Happening to Households," American Demography, March 1979.

[3] The median age at marriage for women has increased from 21.9 in 1965 to 22.5 in 1975. For men the corresponding ages are 24.0 and 24.4. In 1970, 36 percent of all women aged 20-24 were single; by 1976 43 percent of these women were single. For white women the corresponding percentages were 35 percent and 41 percent, while for black women they were 43 percent and 57 percent. U.S. Bureau of the Census, Perspectives on American Fertility, P-23, No. 70, July 1978.

The length of time between marriage and the first child has increased over the last two decades for women of both races (See Table I-1). Between 1960 and 1964, nearly half of all first births to women ever married took place within one year of the mother's first marriage, while 75 percent occurred by the end of the second year. Ten years later the percentage of first births occurring within the first year after marriage was reduced to 39 percent, while those taking place within the first two years accounted for only 60 percent of first births. Time intervals between the first and second child also increased during this period (See Table I-1). However, it is difficult to assess the significance of this pattern since the 1950s data on the timing and spacing of children are more similar to those of the 1970s than to the 1960s. It is not known in what way similarities between the 1950s and 1970s produced like patterns in childspacing. Further, it is difficult to relate patterns in child spacing to household formation since marriage and childspace per se are actually a function of other, often competing events.

There are factors which do affect the age at marriage and the timing of children which may, in turn, have subtle effects on household characteristics. With the increasing participation of women in the labor force, it is likely that women will marry later than did their older counterparts.[1] The fact that couples are marrying at later ages does not necessarily decrease the rate of household formation, although it may appear to do so at first; in fact, the opposite effect is more likely to occur given the propensity of

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[1] Ralph Smith (editor), The Subtle Revolution: Women at Work, The Urban Institute, 1979, p. 127.

Table I-1

CUMULATIVE BIRTH SPACING INTERVALS BY CALENDAR PERIOD OF CHILD'S BIRTH FOR WOMEN EVER MARRIED

	YEAR OF BIRTH								
	All Races			White			Black		
	1970-1974	1960-1964	1950-1954	1970-1974	1960-1965	1950-1954	1970-1974	1960-1964	1950-1954
FIRST BIRTHS (thousands)	6202	5717	5781	5445	4997	NA	598	634	NA
Before Mother's First Marriage	7.4%	9.3%	6.5%	5.3%	5.5%	NA	24.9%	38.4%	NA
After Mother's First Marriage									
12 months	39.2%	48.3%	36.0%	37.1%	45.5%	NA	58.6%	70.5%	NA
24 months	59.6	74.9	62.9	57.9	73.9	NA	74.4	83.7	NA
36 months	74.8	83.9	76.2	73.7	83.1	NA	85.1	90.0	NA
48 months	83.3	89.4	83.7	82.7	89.1	NA	89.3	92.1	NA
Median Interval (Months)	17.4	12.6	17.0	18.6	13.6	NA	8.5	4.1	NA
SECOND BIRTHS (thousands)									
Months After First Birth									
12 months	5.5%	9.3%	7.4%	5.1%	8.8%	NA	8.6%	13.6%	NA
24 months	32.3	48.6	40.1	31.6	48.2	NA	37.9	52.1	NA
36 months	59.8	71.4	64.7	59.3	71.5	NA	63.4	70.3	NA
48 months	78.2	82.5	77.6	78.4	82.6	NA	77.4	81.5	NA
Median Interval (Months)	31.7	24.7	28.8	32.0	24.9	NA	29.7	23.3	NA

Source: U.S. Bureau of the Census, Perspectives on American Fertility, P-23, No. 70, 1978.

young adults to establish independent households before marriage either with other single adults or by themselves.

If women choose both to work and rear children, two offseting effects are likely to occur: time intervals between marriage and successive births may increase in order to ease the burden of motherhood combined with outside work; or couples may choose to have their children in a shorter period of time in order to minimize total years spent in childraising. Other things being equal, periods of prosperity should make children more "affordable" and result in shorter time intervals between marriage and successive births, while periods of hardship should tend to increase these intervals.[1] However, all such decisions assuredly rest on individual circumstances. Thus, although a range of possibilities can be suggested, it cannot be determined with certainty how trends in child spacing will affect household type, number, and size.

3. Mortality Rates

Mortality rates affect the number, type, and size of households. With mortality rates decreasing, persons born in 1976 can expect to live 72.8 years. For whites, life expectancy at birth in 1976 was 73.5 years while for blacks and others it was 68.3 years. Although life expectancy is still higher for whites than for blacks, the gap continues to decrease, and women of both races continue to live longer than men of both races.[2]

Increased longevity throughout the population increases the number of households by decreasing the rate at which households composed of the elderly are dissolved. High levels of transfer payments and good physical health have enabled the elderly to maintain their own households even after the death of a spouse. Additionally, lower death rates alter the size and type of the average family and household by increasing the proportion of one and two person households.

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[1] Birth rates, for example, fell during the 1930s depression.

[2] Jacob Siegel, Prospective Trends in the Size and Structure of the Elderly Population, Impact of Mortality Trends, and Some Implications," P-23, No. 78, January 1979.

Since the proportion of elderly persons residing in cities is higher than both the suburban and U. S. averages and somewhat reduced mortality rates are projected, a further increase in the number of elderly residents living in cities during the 1980s will result. Although death rates are decreasing and changes in this rate do affect the proportion of elderly persons in the U. S. population, the impact of mortality rates on the structure of the entire population and households is limited. The elderly currently comprise only a small proportion of the total population, with 11.2 percent over the age of 65 in 1979. By 1990, this percentage is projected to rise to 13.3 percent.

4. Marriage and Divorce

Marriage and divorce rates have by far the most dramatic effect on household formation; every marriage or divorce taking place affects the type, size and rate of household formation. For example, most of the projected increase in the proportion of single adult households as well as the decrease in husband-wife households can be explained by recent and projected high divorce rates not offset by any increase in marriages. Husband-wife households as a proportion of all households are expected to decrease from 62.3 percent in 1978 to anywhere between 54.7 percent and 60.6 percent by 1990.[1]

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[1] This is the range provided by the two extremes of the Census Series A,B,C and D projections. Series A is represented by the lowest projection, Series D by the highest.

Following more than a decade of comparative flux, marriage and divorce rates are expected to stabilize during the 1980s. As shown in Figures I-C and I-D, the marriage rate rose during the latter half of the 1960s and peaked in 1972 at a rate of 11 marriages per 1,000 population. A moderate decline followed resulting in a rate of 10 marriages per 1,000 population by 1976. It is expected that the marriage rate will remain stable or rise moderately during the next few years and rise more after that. These projections rest on the assumption that the tendency to postpone first marriages will persist, although there may be an increase in the number of marriages among those who had previously postponed them. The outlook for the latter part of the 1980s appears more hospitable to marriage, largely because there will be a smaller number of young adults seeking employment suitable to supporting a marriage--thus, with increased opportunity for suitable employment and advancement potential more people may be financially able to marry.[1]

In 1960 the divorce rate was 2.2 per 1,000 population--its lowest point after the high rates following World War II. Since 1960 this rate has risen dramatically reaching an historic peak of 5.1 in 1977 and 1978 (See Figures I-C and I-D). Divorce rates are a function of several factors among which are economic conditions, social climate, the marriage rate, and, of course, individual circumstances. Although little is known about causality, divorce rates tend to be higher during periods of prosperity just as they are during times when societal attitudes are more lenient.

The divorce rate is, however, linked to the marriage rate in an absolute sense--it follows the marriage pattern of four to six years earlier.[2] Half

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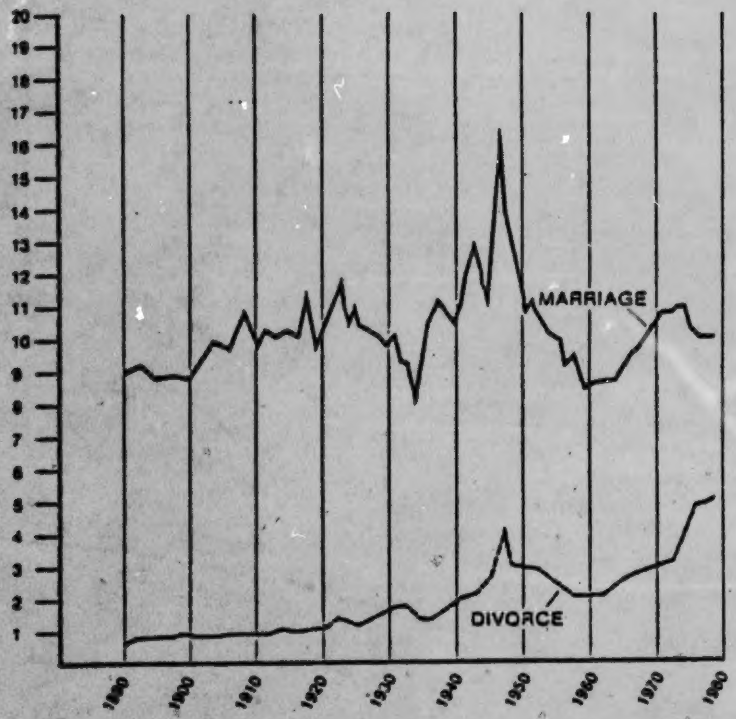
[1] Paul Glick, The Future of the American Family, in Current Population Reports, P-23, No. 78, January 1979, p. 3, and Arthur Norton and Paul Glick, "What's Happening to Households," American Demography, March 1979, pp. 19-22.

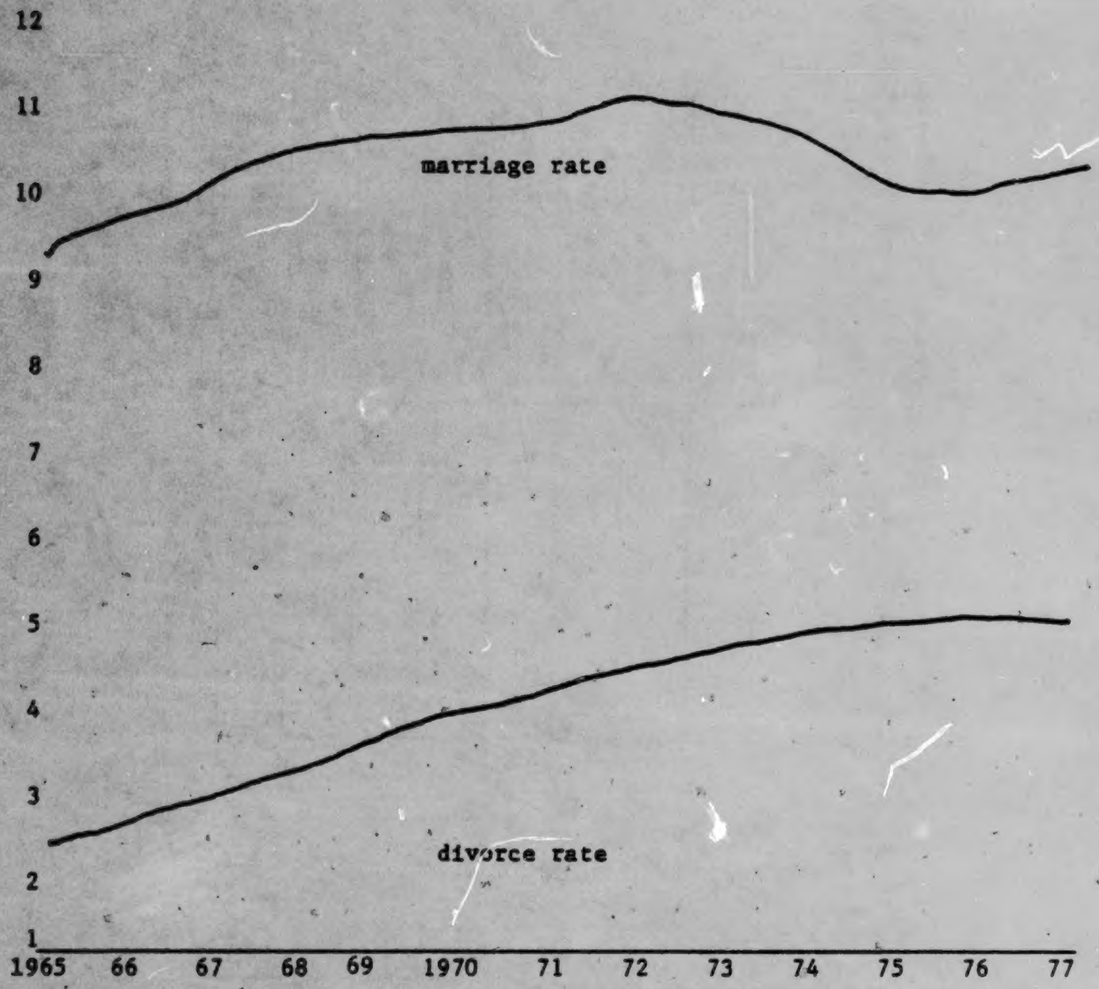
[2] All Census Series projections show a decrease in the rate of household formation.

Figure I-C
MARRIAGE AND DIVORCE RATES
(per 1,000 population) U.S., 1890-1978



Source: Ralph Smith (editor), The Subtle Revolution, The Urban Institute, 1979, p. 101.

Figure I-D
U.S. MARRIAGE AND DIVORCE RATES 1965-1975
(per 1,000 population)



Source: U.S. Department of HEW, Vital Statistics of the United States, Vol. 2, Marriage and Divorce.

U.S. Bureau of the Census, Statistical Abstract of the United States, 1978.

of all divorces after first marriages occur within seven years of the marriage, and half of all divorces after remarriage occur within three years. This tendency explains the high divorce rate of 1977 as a result of the high 1972 marriage level. Thus, it can be expected that the divorce rates for the beginning of the 1980s may decline slightly and follow the marriage rate of four to six years earlier.

5. Household Formation in the 1980s

The most significant observation concerning household formation is that the rate of new household formation in the second half of the 1980s will decrease (See Table I-2). This projected decrease recognizes that the baby boom generation will have "moved through" the age group most likely to be forming new households. It also reflects a period of relative stability owing to a somewhat high projected rate of marriage and a more stable divorce rate. In addition, as shown in Table I-3, the size of households will decrease.

The Census Bureau provides detailed estimates and projections of the type and number of households. The projections vary according to each series, but all are based on trend extrapolations of changes in marital and household status of previous time periods, with varying weights accorded to different time periods.[1] Based upon projected marriage and divorce rates discussed

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[1] Household Series B was derived by fitting into a model data on the age, sex, and marital status distribution of the population for March 1 of each year 1964 through 1978. Marital status and household proportions were projected by using a weighted least squares procedure (fitting an exponential curve with continuous compounding to the original proportions). The projected proportions used in Series A and D were weighted averages of the Series B proportions and the 1978 observed proportions. The weights used for the Series D projections were 1/3 for the Series B projections and 2/3 for the 1978 proportions. For Series A 2/3 weight was given to Series B and 1/3 to the 1978 proportions. Series C projections were obtained by using data from the years 1974 through 1978 to obtain the 1980 projection. Data from the years 1966 through 1980 were used to obtain the 1995 projections. Series K (not shown here) projections were derived by holding constant marital status and household proportions seen in 1978.

Table I-2

RATES OF HOUSEHOLD FORMATION 1950-1990

	No. Households (in millions)		Average Annual Income Over Previous Period (in thousands)		Percent Change Over Previous Period	
1950	43.6		1,525		-	
1955	47.9		850		11.0%	
1960	52.8		959		10.2	
1965	57.4		927		10.9	
1970	63.4		1,193		10.5	
1975	71.1		1,544		12.2	
PROJECTIONS	SERIES B	SERIES D	SERIES B	SERIES D	SERIES B	SERIES D
1980	79.9	79.3	1,760	1,646	12.4	11.5
1985	88.6	86.4	1,739	1,409	10.9	8.9
1990	96.6	92.4	1,618	1,200	9.1	6.9

Source: U. S. Bureau of the Census. Projections of the Number of Households and Families: 1979 to 1995, P-25, No. 805, May 1979.

Table I-3a

CURRENT AND PROJECTED HOUSEHOLD CHARACTERISTICS

		Census Series D Projections		
	1978	1980	1985	1990
Total Households (thousands)	76,030	79,349	86,393	42,394
Percentage Distribution by Type				
Non-family households	25.1%	25.4%	25.4%	26.2%
Family households	74.9	74.7	74.1	73.8
Husband-wife	(62.3)	(62.0)	(61.2)	(60.6)
One adult head	(12.7)	(12.7)	(12.9)	(13.2)
Mean Persons per Household				
Total households	2.81	2.74	2.64	2.58
Family households	3.33	3.26	3.14	3.07

Projections are for July 1st in each year. The estimates for 1978 are for March 1st.

Table I-3b

ALTERNATIVE PROJECTIONS OF 1990 HOUSEHOLD CHARACTERISTICS
(Population Projection Series II)

	Bureau of the Census Projections for 1990			
	Series A	Series B	Series C	Series D
Total Households (thousands)	98,950	96,653	96,792	92,394
Percentage Distribution by Type				
Non-family households	30.5%	29.1%	30.6%	26.2%
Family households	69.5	70.9	69.4	73.8
Husband-wife	(54.7)	(56.6)	(54.8)	(60.6)
One adult head	(14.8)	(14.3)	(14.6)	(13.2)
Mean Persons per Household				
Total households	2.41	2.47	2.47	2.58
Family households	2.97	3.01	3.04	3.07

Projections are for July 1st, 1990.

Source: Forthcoming paper of the Transportation Studies Program, The Urban Institute.

earlier (these rates are likely to stabilize or rise slowly during the 1980s), Series D may more closely approximate household formation rates and types than does Series B. As noted, Series D is weighted most heavily by 1978 marital and household status proportions.[1] As a projection, this would mean that 2/3 weight would be given to the constant rate of 1978, and 1/3 weight to the previous years which showed an increased rate of marital dissolution and, hence, household formation. Thus Series D suggests more stability than change.

As mentioned previously, the number of households has been rising sharply, and the peak rate of household formation was reached between 1975 and 1980 at an average annual increase of 1.5 million. At the same time, household and family size was decreasing as was the proportion of husband-wife households. The 1980s will exhibit a continuation of these trends, but to a lesser extent.[2]

Table I-2 shows past and projected household formation patterns using Series D and, as a comparison, Series B. Under Series B assumptions, the rate of household formation shows an insignificant increase between 1975 and 1980 and a decreasing rate thereafter. Series D projects an even higher rate of decrease, especially during the latter part of the decade, such that by 1990 new household formation rates will be only 73 percent of the 1975 level. Equally as noteworthy is the projection that the rate of household formation will be far lower than at any other time since the 1950 through 1955 period.[3]

The mean size of both households and families will continue to decrease so that by 1990 the mean size will be 2.58 for all households and 3.07 for families (See Table I-3b). Family households will continue as the dominant living arrangement but to a somewhat lesser extent and, among family households, there will be a greater percentage of single adult families and a decrease in the proportion of husband-wife families.

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[1] In subsequent sections of this report, both Series B and Series D projections are shown where applicable.

[2] U. S. Bureau of the Census, Projections of the Number of Households and Families: 1979-1995, P-25, No. 805, May 1979.

[3] The number of households formed will be 8.9 million between 1980 and 1985 compared to 12.2 million between 1970 and 1975.

6. Urban Demographic Patterns

While the character of American households and families is being redefined as a result of demographic changes, aggregate trends discussed in previous sections mask important geographic and jurisdictional divergences. There are, as discussed subsequently, differences in demographic trends between large cities and small cities, distressed and non-distressed cities, and between cities and their suburbs.

Birth and Death Rates

There are substantial variations in birth and death rates at the subnational level, particularly in distressed cities, as shown in Table I-4. In these cities, birth rates are 11 percent below and death rates 19 percent below the national average.

Based on a small sample, cities with strong economies have above average birth rates. Suburbs follow the patterns of their central cities, with higher birth rates and lower death rates in places with strong economies (such as Denver) compared to distressed areas. This reflects the young age profile of growing suburban areas. As a result of these demographic patterns, population gains resulting from natural increase in distressed cities are small and are likely to remain small in the 1980s. Birth rates should continue to be high in suburbs of growing metropolitan areas in the South and West, with birth rates in suburbs of distressed cities close to those of their central cities.

Table I-4

DIFFERENCES IN ANNUAL BIRTH AND DEATH RATES IN CITIES AND SUBURBS--1970-1977[a]

	Birth Rate	Death Rate	Net Difference
Distressed Cities[b]	1.48	1.21	0.27
Other Cities[c]	1.75	1.01	0.74
Suburbs-Distressed Cities	1.40	0.93	0.47
Suburbs-Other Cities	2.00	0.91	1.09
Nonmetropolitan Area	1.74	1.12	0.62
U.S. Average	1.67	0.98	0.69

a. Births and deaths are given as a percent of the 1970 population.
b. Boston, Baltimore, Philadelphia, New York, St. Louis.
c. Denver, Jacksonville, Nashville, New Orleans.

Source: U.S. Bureau of the Census, Estimates of the Population of Counties and Metropolitan Areas: July 1, 1976 and 1977, P-25, No. 810, September 1979.

There will also be variation by city size and the racial composition of cities. Table I-5 shows that young children of each "racial/ethnic" group as a proportion of the total population have decreased between 1970 and 1977. This measure primarily represents changes in the number of births. In cities of large metropolitan areas, the highest rate of decrease was for blacks, followed closely by whites. The smallest rate of decrease was for Hispanic persons. In cities of smaller metropolitan areas, whites registered the largest decrease followed by blacks. There was no change for Hispanics. In almost all cases the proportion of children in a given population was greater for cities in smaller metropolitan areas, and the rates of decrease were lower than for cities of large metropolitan areas. These data suggest that even small rates of outmigration from large central cities will result in further population decline.

Marriage and Divorce

While projections of marriage and divorce rates for individual cities and their suburbs could not be made, variations were found in the rates of marriage and divorce for major U.S. cities and the states in which they are located. Interestingly, there appears to be no particular pattern for cities versus the states in which they are located, although a different distinction does emerge: both marriage and divorce rates are lower in most distressed cities compared to non-distressed cities. For example, in 1975 the marriage rate in Denver was 15.5 while in St. Louis it was 9.6. The divorce rates for these cities were 7.6 and 3.9, respectively.

As shown in Table I-6, marriage rates are lower in most central cities compared to states, and, with the exception of New York, the distressed cities have lower marriage rates than the entire state. Except for Philadelphia,

Table I-5

CHILDREN UNDER FIVE YEARS OLD AS PERCENT OF TOTAL POPULATION
(In thousands)

	Central Cities of Large Metro Areas			Central Cities of Small Metro Areas		
	1970	1977	% Change	1970	1977	% Change
White	7.3	6.1	-16.4%	8.0	6.9	-13.7%
Black	10.8	8.9	-17.6%	11.0	10.3	- 6.4%
Hispanic	12.6	11.9	- 5.5%	12.6	12.6	0.0%

Source: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

divorce rates exceed the state averages only in non-distressed cities. Given the above information, some speculation can be made concerning future marriage and divorce rates in cities. Since both marriage and divorce rates are lower in distressed as opposed to non-distressed cities, both marital unions and dissolutions will probably continue to lag behind state rates and rates in healthier cities.

Household Characteristics

The projected decrease in household size should increase the demand for smaller, higher density housing units typically located in older cities. Smaller household size combined with decreasing rates of household formation should result in a lower level of demand for city services. These changes should provide a fiscal benefit to cities. However, the aging population of central cities discussed in subsequent parts of this report will increase the demand for social services.

Table I-6

MARRIAGE AND DIVORCE RATES FOR CITIES AND STATES--1975

(Rates per 1,000 population)

	Marriage Rate	Divorce Rate
U.S. Average	10.1	4.9
California	7.3	6.1
San Francisco	8.8	5.4
Colorado	10.8	6.2
Denver	15.5	7.6
Florida	10.3	7.7
Jacksonville	9.5	10.2
St. Petersburg (Pinellas County)	9.0	6.4
Louisiana	9.8	2.3
New Orleans	9.0	3.3
Tennessee	12.3	5.9
Nashville	9.6	7.5
Virginia	11.0	3.9
Richmond	12.8	5.3
Massachusetts	7.2	2.8
Boston	5.9	2.5
Missouri	10.5	5.1
St. Louis	9.6	3.9
New York	7.9	3.1
New York City	8.1	3.1
Pennsylvania	7.7	3.0
Philadelphia	5.6	3.1

Sources: U.S. Department of HEW, Vital Statistics, 1975.
U.S. Bureau of the Census, Estimates of the Population of Counties and Metropolitan Areas, July 1, 1974 and 1975, P-25, No. 709, September 1977.
____________________, Statistical Abstract of the United States, 1978.

II. MOBILITY OF THE POPULATION

1. Overview

As stated at the outset, a number of demographic trends evidenced during the 1970s promise to continue modifying the profile of the urban household in the decade of the 1980s. Given that both demographic as well as socio-economic trends shape the American household, the urban household may be viewed as a dynamic unit that seeks to satisfy numerous and diverse needs. In some instance, a satisfactory response to those needs requires household relocation.

It appears, for example, that the perceived quality of schools and other urban services, the requirements for additional living space, or a combination thereof are common determinants of suburban relocation of families with children, provided that a family is financially able to leave the city. Specifically, central cities are continuing to lose white family households, particularly those with children under age of eighteen. At the same time, the number of black central city families with and without children has been increasing at approximately the same rate. (See table below.)

Whatever the locational requirements of household relocation, it is clear that the movement of households into and out of central cities and suburbs, various geographic regions, and metropolitan and non-metropolitan areas alters the demographic character of areas undergoing net population change, particularly given the variation in household response to demographic and socio-economic trends. Consideration of age alone as a determinant of mobility, for instance, usually reveals that the population of an area gaining new residents is typically younger than that of an area losing residents, owing to young adults' propensity to move. Household relocation, commonly termed either net migration or mobility (total moves into an area minus total moves out of the same area) can, in turn, generate a shift in the demand for housing, social services, and public services as well as in the opportunities for economic development.

In broad overview, the major migratory patterns observed in the U.S. during the 1970-75 and 1975-78 periods include:[1]

- a slight increase in outmigration from the nation's central cities among persons aged 20-34 despite no significant change in the rate of central city outmigration for the total metropolitan population;
- a tendency for central city outmigration to be concentrated among young families in the $15,000-$25,000 income range;
- central city population gains in Sunbelt cities attributable to annexation rather than inmigration;
- a slight decline in the overall rate of inter-regional migration, particularly into the South and West;
- a reversal in the traditional black outmigration from the South;
- an overall non-metropolitan growth rate that, for the first time since World War II, exceeds that of metropolitan areas.

This section of the report discusses population migration within metropolitan areas across multi-state regions, and into and out of metropolitan and non-metropolitan areas during the 1970s. Since the report focuses primarily on the urban household, the discussion of metropolitan movement, in particular, is organized around some of the more important demographic and socio-economic determinants of mobility, including age, race, and income. The extent to which the so-called "back to the city" movement, city size, and annexation contribute to metropolitan population change is also considered. In all instances, projections for the 1980s have been developed in accordance with the probable trends suggested by the available 1970s data and the expected level of economic growth discussed in a subsequent section.

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[1] The U.S. Bureau of the Census maintains migration data for the 1970s for the two periods specified. Since the data cannot for various reasons be aggregated, they must be presented in disaggregated form. Disaggregation, however, permits some comparison within the decade.

FAMILIES WITH AND WITHOUT CHILDREN IN CENTRAL CITIES
BY RACE: 1970-1977
(in millions)

	1970		1977		Percent Change 1970-1977	
Family Unit	Black	White	Black	White	Black	White
With Children	2.0	6.5	2.2	5.9	10.0%	-9.2%
Without Children	0.9	6.2	1.0	6.0	11.1%	-3.2%

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population, P-23, No. 75, November 1978.

2. Metropolitan Mobility

Mobility and Age

Despite some lack of comparability between data sets for central city mobility trends during the 1970s,[1] it appears that the nationwide rate of net outmigration from central cities decreased slightly for the 1970-1975 and 1975-1978 periods (see Appendix A, Table 1). In fact, net outward movement as a proportion of the declining total central city population in 1970 and 1977, respectively, decreased only marginally—from 2.6 to 2.5 percent (see Table II-1 below). Distribution of the moving population by age for the 1970-1975 and 1975-1978 intervals shows, however, that the annual rate of net outward movement actually increased for the 20-24 and 25-34 age groups. Not surprisingly, the 20-34 age group as a whole generally exhibits the highest propensity toward mobility. As young adults leave their parents' homes and establish their own households and financial independence, they frequently make numerous housing adjustments.

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[1] Among the constraints on direct comparability, mobility data maintained for the 1970-1975 period do not account for persons under 5 years of age, whereas mobility data for the 1975-1978 period do not account for persons under 3 years of age. In order to ensure some uniformity across the two periods, persons under 5 years of age were removed from both data sets. Nationally, totals were adjusted accordingly.

Specifically, net outward movers among the 25-34 age group as a proportion of total central city residents increased from 0.77% during the first period to 0.95% during the second interval. Stated more dramatically, slightly more than one of every three net outward moves among all central city residents was attributable to members of the 25-34 age group.

The full impact of significant net outward movement among the members of any age group cannot be determined without first drawing a profile of the non-moving population. One of the most immobile segments of the population is the 65 and over group. In fact, the proportion of 65 and over net outward movers to total central city residents declined from 0.26% in 1970-75 to 0.13% in 1975-78. The absolute and relative increases in the number of senior citizens as shown in Table II-2, coupled with a decreasing propensity to move, suggest that the nation's central cities, in particular, increasingly became home to the elderly in the 1970s.

TABLE II-1

CENTRAL CITY NET OUTMIGRATION AS PROPORTION OF CENTRAL CITY POPULATION 1970-75 AND 1975-78
(in millions)
(excludes persons under 5 years of age)

Age Group	Average Annual Number Net Moves 1970-75	Average Annual Number Net Moves 1975-78	Central City Population Year	Central City Population Number
5-14	-0.36	-0.34	1970	57.6
15-19	-0.10	-0.07		
20-24	-0.04	-0.10		
25-34	-0.44	-0.53	1974	56.7
35-44	-0.20	-0.17		
45-64	-0.20	-0.17		
65+	-0.15	-0.07	1978	55.7
TOTAL/AVERAGE	-1.48	-1.43		

Average Annual Number Net Central City Moves for 1970-75 as Proportion 1974 Central City Population	-2.6%
Average Annual Number Net Central City Moves for 1975-78 as Proportion 1978 Central City Population	-2.5%

Source: U.S. Bureau of the Census, Mobility of the Population of the United States, March 1970 to March 1975, P-20, No. 285, October 1975.

U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1970 and 1974, P-23, No. 55, September 1975.

U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1970 and 1977, P-23, No. 75, November 1978.

TABLE II-2: CITY/SUBURBAN POPULATION BY AGE

	1970			1974			1977			1990
Age-Group	City	Suburbs	U.S.	City	Suburbs	U.S.	City	Suburbs	U.S.	U.S
5-13	16.9%	19.7%	18.6%	15.2%	17.2%	16.4%	13.9%	15.7%	15.2%	14.5%
14-17	7.2	8.2	7.9	7.4	8.2	8.0	7.1	8.1	7.8	6.0
18-24	12.4	10.3	11.1	13.1	12.2	12.3	13.8	12.7	12.9	11.2
25-34	12.5	12.8	12.3	14.3	14.6	13.9	15.6	15.8	15.2	18.3
35-44	10.8	12.5	11.4	10.1	11.6	10.9	9.9	11.8	10.9	16.3
45-64	21.3	20.1	20.6	21.0	20.3	20.6	20.9	20.4	20.4	20.6
65+	10.6	7.7	9.6	10.8	8.0	9.9	11.4	8.4	10.4	13.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median Age	29.2	27.4	28.2	29.4	28.1	28.8	30.0	29.1	29.5	32.8

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970; 1977 and 1970, P-23, Nos. 55 and 75, September 1975 and November 1978, respectively.

U.S. Bureau of the Census, Projections of the Population of the United States: 1974-2050, P-25, No. 704, July 1977.

Mobility and Race

While the published metropolitan mobility data maintained for the black population are far less detailed than those collected for the total population, the available information does reveal trends in the rate and direction of black metropolitan movement which diverge from the national patterns in metropolitan mobility. It appears that, unlike the total United States population, the black population demonstrated a slightly increasingly propensity toward net outward movement from the nation's central cities between 1970-1975 and 1975-1978 (see Table II-3). Although net outward movement as a proportion of the total black central city population increased from 0.43% in 1970 to 1.05 in 1975, it nonetheless represented less than one-half the rate of total outward movement from all central cities. In fact, the low rate of black outmigration coupled with high fertility rates resulted in the black central city population increase observed between 1970 and 1974 as illustrated in Table II-4A.

Since metropolitan mobility data are not maintained by age for the black population, an age-specific profile of the moving and non-moving populations could not be established. Nonetheless, by generally relating the age-specific moving probabilities for the overall United States population to the total black central city population distributed by age, it is possible to develop some insight into the extent to which various age groups can generally be expected to move. As shown in the table below for example, the 18-24 age group[1] accounted for 24% of the total black central city population in 1970 and increased to nearly 28% in 1977,

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[1] The only data source on intra-metropolitan distribution of the population by age (U.S. Bureau of the Census, *Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population*, P-23, Nos. 55 and 75) uses an 18-24 and 25-34 age aggregation rather than the 20-24 and 25-35 aggregation used in other Census sources.

TABLE II-3: TOTAL AND AVERAGE ANNUAL NUMBER OF MINORITY MOVERS INTO/OUT OF CENTRAL CITIES[1/]

(In millions)

Period	Total Moves Out	Annual Number Moves Out	Total Moves In	Annual Number Moves In	Total Net Moves	Annual Number Net Moves
BLACK						
1970-75	-0.980	-0.200	0.737	0.150	-0.243	-0.050
1975-78	-0.986	-0.333	0.599	0.209	-0.387	-0.133
HISPANIC						
1975-78	-0.7	-0.2	0.4	0.1	0.3	-0.1

SOURCE: U.S. Bureau of the Census, Mobility of the Population of the United States March 1970 to March 1975, P-20, No. 285, October 1975.

U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

[1/] Persons under 5 years of age are excluded from the 1970-1975 data, while persons under 3 are excluded from the 1975-1978 data.

roughly paralleling the proportionate distribution of the same group for the total United States population. Given the age distribution similarities for the 18-34 group between the total and black populations as well as the high propensity for movement within the 18-34 group nationally, it is probably safe to conclude that the rate of net central city outward movement within the black population was greatest among individuals aged 18-34.

PERCENT AGE DISTRIBUTION OF CENTRAL CITY POPULATION:
U.S. TOTAL AND BLACK POPULATIONS

	Percent All Races a/			Percent Black Total a/		
Age Group	1970	1974	1977	1970	1974	1977
Under 5	8.3%	8.0%	7.2%	10.9%	10.7%	9.4%
5-13	16.9	15.2	13.9	22.5	20.4	18.5
14-17	7.2	7.4	7.1	8.7	9.1	9.2
18-34	24.9	27.4	29.4	23.9	26.4	27.6
35-44	10.8	10.1	9.9	11.2	10.1	10.3
45+	31.9	31.8	32.3	23.0	23.2	25.0

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1974 and 1970, P-23, No. 55, September 1975.

U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

a/ Totals may not add to 100 percent because of rounding.

TABLE II-4A: BLACK CENTRAL CITY POPULATION
(excludes persons under 5 years of age)
(in millions)

Year	Number
1970	11.5
1974	12.3
1977	12.2
Percent Change 1970-1977	6.1%

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1970 and 1974, P-23, No. 55, September 1975.

U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

TABLE II-4B: HISPANIC CENTRAL CITY POPULATION
(excludes persons under 5 years of age)
(in millions)

Year	Number
1970	4.1
1974	4.6
1977	4.9
Percent Change 1970-1977	19.5%

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1974 and 1970, P-23, No. 55, September 1975.

U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

The published metropolitan data for the Hispanic[1/] population are available only for the 1975-1978 period. Briefly, Table II-3 shows that the annual net outmigration of Hispanics from central cities averaged 100 thousand residents between 1975 and 1978. Despite net outmigration, the Hispanic population in central cities increased by about 19.5% between 1970 and 1977 as shown in Table II-4B. The statistics suggest a combined high birth rate and significant level of Hispanic immigration to central cities from other nations.

Mobility and Income

The economic vitality of central cities has been affected by both the net outmigration of families and the income differential between outward and inward moving families. The mean income of families leaving the city between 1975 and 1977 was $16,000 compared to $15,000 for those moving into the city. The aggregate income of outmigrating families was $32 billion, an amount considerably higher than the $15 billion for immigrating families. As a consequence of outmigration among families, central city income was $17 billion less than it would have been in the absence of any net migration. This amount equals 6.4% of the aggregate central city family income in 1976.

As Table II-5 below suggests, the propensity to relocate from central cities to suburbs is related to a family's income level. The pace of outmigration was slowest among low-income families, which no doubt find suburban housing and the cost of relocation beyond their financial reach. During 1975-1978, middle-income families were most disposed toward suburban relocation, particularly if the head

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[1/] Persons of Spanish origin may be of any race.

TABLE II-5: CENTRAL CITY/SUBURBAN MIGRATION PATTERNS BY INCOME
(in thousands)

Family Income (in 1977 dollars)	Number of Families 1/ Central Cities	Suburbs	Movers from: Central City to Suburbs	Suburbs to Central City	Net Central City Change 2/	Percent Central City Outflow
Under $5,000	295	225	46	32	- 14	- 4.7%
$5,000-$10,000	905	1070	175	81	- 94	-10.4
$10,000-$15,000	1407	1956	244	104	-140	-10.0
$15,000-$25,000	2983	5571	692	245	-447	-15.0
$25,000 and over	2049	5020	423	168	-255	-12.4

SOURCE: U.S. Bureau of the Census, Geographic Mobility March 1975 to March 1978, P-20, No. 331, November 1978.

1/ Husband-wife families with head 14-54 years old.

2/ These changes exclude central city-nonmetropolitan movement.

of household fell into the 25-34 age group. Young families in the $15,000-$25,000 income range can anticipate both income growth and the expansion of their families, two conditions that make the prospect of suburban homeownership attractive. At the same time, high-income central city families showed a somewhat lower propensity toward suburban relocation, probably owing to their relatively high rate of homeownership.

As shown in the table below, the proportion of black families in income categories least associated with mobility is three times as large as the share of white families in the same income groups. The percentage of black households with incomes over $15,000, the group most likely to move, is substantially below that of white families. Therefore, if blacks in a particular income group are as likely to move as the total population in that group, the number of black families leaving our central cities will be small despite increases in the rate of black outmigration.

PERCENT DISTRIBUTION OF CENTRAL CITY FAMILIES
BY INCOME AND RACE — 1976

Family Income (in 1977 dollars)	White Families	Black Families
Under $5,000	9.4%	26.8%
$5,000-$10,000	19.9	26.0
$10,000-$15,000	20.3	18.7
$15,000-$25,000	32.6	21.6
$25,000 and over	17.8	6.8

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

3. Metropolitan Population Change

General Trends

Although the level of outmigration from older American cities accelerated between 1967 and the early 1970s, some observers have hailed the late 1970s as marking the beginning of an older central city "renaissance." The so-called "back to the city" movement is presumably attributable, at least in part, to rising energy costs. It has been argued that the "renaissance" has injected new vitality into otherwise declining central cities, improved the housing stock, and expanded the tax base. In view of increases in energy costs, the "renassaince," it is suggested, should continue into the 1980s.

Others, however, including the authors of this report, are less optimistic about the "back to the city" movement.[1] As discussed earlier, there is evidence that more childless households are remaining in our cities. At the same time, though, there is no indication that suburban family households with school age children are returning to the nation's central cities. While high suburban housing prices no doubt encourage some urban households to remain in our cities, some of the underlying problems—fewer employment opportunities in some sectors, high crime rates, and high taxes—continue to plague central cities and to deter suburban households from urban inmigration.

As shown in the table below, aggregate central city growth among whites halted during the 1960s, with the 1970s showing substantial losses. Population increases among blacks declined during the 1960s, but still remained positive during the 1970s. In suburban areas, the white growth rate declined during the 1960s and 1970s, while the black population expanded. The percentage of blacks in suburbs, however, was less than 6% in 1977 as compared to 23% in central cities. By contrast, only 12% of the nation's central city population was black in 1950, indicating that the black share of the central city population has grown rapidly despite increased black movement to suburbs.

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[1] Dennis E. Gale, "Middle Class Resettlement in Older Urban Neighborhoods," *Journal of the American Planning Association*, Vol. 45, No. 3, June 1979.

ANNUAL PERCENTAGE CHANGES IN POPULATION BY RACE: 1950-1977

	1950-1960	1960-1970	1970-1977
White			
Central Cities	0.6	0	-1.2
Suburbs	3.8	2.3	1.3
Black			
Central Cities	4.1	2.9	0.9
Suburbs	2.1	2.4	4.2

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Population in Metropolitan and Non-Metropolitan Areas: 1970 and 1960, P. 23, No. 37, June 1971.

U.S. Bureau of the Census, Social and Economic Characteristics of Metropolitan and Non-Metropolitan Population: 1977 and 1970, No. 35, November 1978.

Change by Size of Central City

Data on intrametropolitan population change, aggregated for the 63[1] central cities with populations of 200,000 and above, demonstrate that central cities continued to experience population losses during the 1970-73 and 1973-76 periods, though at a decreasing rate. Removing New York City from the universe of cities,[1] the nation's 62 largest cities lost 1.8% of their population over the 1970-73 period and an additional 1.2% during the 1973-76 interval as shown in Table II-6. Suburbs of these metropolitan areas gained population at a decreasing rate: 5.3 percent and 3.7 percent during the 1970-73 and 1973-76 periods.

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[1] There are actually 64 cities that meet the 200,000 and over population criterion. The data for Honolulu, one of the 64 cities, frequently include Honolulu County, thus introducing an upward bias into the central city figures. Consequently, Honolulu is excluded from the set of cities that fulfill the population criterion.

At the regional level, the large Northeast and North Central cities experienced a declining rate of population loss between the 1970-73 and 1973-76 periods. (See Table II-6). By contrast, cities in the South and West realized population increases over both periods, although the numerical gains were modest. Given the reduced rate of natural increase, the small gains in the South and West indicate that cities in these two regions actually experienced net outmigration. The suburbs of both New York City and the other Northeast cities collectively lost population during the 1973-76 period, while suburbs in other regions, including the South, gained population at a decreasing rate between the 1970-73 and 1973-76 periods.

Disaggregation of the nation's 243 central cities[2] into two groups with a) 200,000 and over population, and b) 50,000 to 200,000 population, fails to disclose any differential in the rate of population change between 1970 and 1977. Table II-7 illustrates that central cities with 200,000 and over population experienced a 4.0% decline, while all other central cities lost 4.1% of their

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[1] Since New York City's population represents approximately 18% of the total U.S. central city population for cities with population 200,000 and above, it was removed from the universe of cities to avoid unnecessary biases in the rates of national and regional central city and suburban change.

[2] By 1977, the total number of central cities (i.e., cities with a minimum population of 50,000) had grown to 277. In order to ensure some degree of comparability between 1970 and 1977, the number of cities was held constant at 243. Similarly, central city boundaries were held constant even where annexation occurred.

TABLE II-6

POPULATION CHANGE BY REGION FOR CITIES OF 200,000+ AND THEIR SUBURBS 1/
(in thousands)

	Total City Population			Percent Change	
Region	1970	1973	1976	1970-73	1973-76
Northeast	12,407	11,931	11,521	-3.8%	-3.4%
New York City	7,895	7,647	7,423	-3.1	-2.9
Balance of NE	4,512	4,284	4,098	-5.1	-4.3
North Central	11,685	11,030	10,599	-5.6	-3.9
South	11,245	11,363	11,513	1.0	1.3
West 2/	8,168	8,290	8,320	1.5	0.4
Total	43,505	42,614	41,953	-2.1	-1.4
Total (excluding NYC)	35,610	34,967	34,530	-1.8	-1.2

	Total Suburban Population			Percent Change	
Region	1970	1973	1976	1970-73	1973-76
Northeast	12,667	12,845	12,828	1.4%	- .1%
New York City	2,079	2,092	2,086	0.6	-0.3
Balance of NE	10,558	10,753	10,742	1.6	-0.1
North Central	15,900	16,690	17,064	5.0	2.2
South	11,880	13,064	14,004	10.0	7.2
West 2/	10,536	11,009	11,593	4.5	5.3
Total	50,983	53,608	55,489	5.1	3.5
Total (excluding NYC)	48,904	51,516	53,403	5.3	3.7

SOURCE: U.S. Bureau of the Census, Statistical Abstract of the United States, 1975, 1977, 1978.

1/ Includes one central city per SMSA, regardless of whether or not there is more than one central city within an SMSA.

2/ Excludes Honolulu.

residents. Accordingly, it would appear that city size alone, at least at the national level, bears little relationship to the rate of central city population change. Corresponding rates of change for the suburban areas surrounding the nation's central cities could not be derived from the available data at either the national or regional level.[1]

TABLE II-7

POPULATION CHANGE FOR ALL U.S. CITIES OF 50,000+ POPULATION
(in thousands)

Category of City	Number	Population 1970	Population 1977	Change Number	Change Percent
All Cities 50,000+[2]	243	62,876	60,334	-2,542	-4.0
All Cities 200,000+[3]	63	43,709	41,954	-1,755	-4.0
All Cities 50,000-200,000	180	19,167	18,380	-787	-4.1

SOURCE: U.S. Bureau of the Census, Population Profile of the United States: 1977, P-20, No. 324, April 1978.

U.S. Bureau of the Census, Population Estimates and Projections, P-25, Nos. 814-863.

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[1] The 1977 metropolitan (SMSA) data needed to determine suburban growth rates reflect boundary and, thus, population changes realized through annexation during 1970-77. Central city boundaries, however, were held constant over the same period. As a result, the suburban data would be incompatible with the city data.

[2] Note that the 1970 and 1977 data for the central cities refer to their 1970 corporate boundaries and exclude areas annexed since 1970.

[3] Estimates of total central city population were not obtained by the same statistical methods as estimates for large cities. Population estimates exclude members of the Armed Forces and institutionalized persons.

Annexation and Central City Growth

One of the characteristics that distinguishes most distressed northern cities from those in the South and West is annexation. Among the ten cities that added large land areas in the 1970s, seven were in the South, one in the West (Phoenix), two in the North Central states (Columbus and Kansas City), but none in the Northeast. As shown in Table II-8, annexation remains concentrated in the South and West. Among the states with most annexation, eight are in the South and West, two in North Central states.

Because newly annexed areas are typically characterized by low density detached housing, cities such as Houston and Phoenix that undertake large-scale annexation tend to approximate sourthern and western metropolitan areas in their demographic and economic profiles. Population gains in most large southern and western cities since 1960 are attributable to annexation rather than to natural increase or inmigration into their pre-1960 boundaries. On the other hand, cities with constrained boundaries—such as Richmond and San Francisco—show levels of outmigration similar to their northern counterparts. Despite regional variation in the rate of annexation, the opportunities for annexation by large cities will be reduced during the 1980s by the level of incorporation that has already occurred near city boundaries and by state legislative constraints such as those imposed in Colorado and Virginia.

Central cities unable to annex in the future will continue to be affected adversely by outward mobility. The demand for key public services supported by local funds—schools, public safety, street maintenance, and others—did not diminish during the 1970s despite lower population, and are unlikely to diminish substantially in the foreseeable future. For example, while school enrollment

TABLE II-8

ANNEXATION BY LARGE CITIES: 1970-1977[1]

City	1970 Land Area (in sq. miles)	Area Added By Annexation 1970-1977 (in sq. miles)	Percent of 1970 Land Area Added by Annexation 1970-1977
Houston	521	87	16.7%
San Antonio	264	80	30.3
Dallas	342	76	22.2
Memphis	281	63	22.4
El Paso	176	58	33.0
Kansas City	111	54	48.6
Austin	114	42	36.8
Columbus	174	39	22.4
Phoenix	275	27	9.8
Birmingham	98	19	19.4

Annexation by State: 1970-1977[1]

State	Square Miles	Estimated Population in Annexed Areas (in thousands)	Population Density (persons per square mile)
Texas	1,181	370	313
California	578	166	287
Arizona	344	71	206
Oklahoma	304	33	109
Florida	282	118	418
Illinois	299	774	2,589
Tennessee	295	197	668
Alaska	396	42	106
Colorado	214	78	364
Minnesota	241	32	133
TOTAL	4,134	1,881	455

SOURCE: U.S. Bureau of the Census, Boundary and Annexation Survey 1970-1977, GE-30-3, 1979.

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[1] Includes cities and states with largest land areas annexed by local jurisdictions.

drops, the number of students requiring costly special education tends to rise.[1] However, the tax base needed to provide services will be reduced as the income of outmigrants from cities tends to be higher than that of the remaining population. One favorable effect of outmigration is that the most marginal housing stock can be demolished, improving the overall quality of housing if sufficient outlays are available for adequate maintenance.

Based on trends during the 1970s, most large Northeast and East North Central suburbs will see as many persons moving in as moving out. By contrast, suburbs in the South and West can be expected to grow as a result of inmigration from both northern regions and central cities not annexing large suburban land areas.

All indications are that the outer suburbs will continue to grow in all regions as new households move outward from the urban core to the periphery of metropolitan areas. The extent to which high gasoline prices will temper this trend is difficult to estimate. High commuting costs to the core should cause land on the fringe of urbanization to be less expensive than land close to the core, and the differential is likely to increase in areas with mass transit facilities. Lower housing costs resulting from lower land prices can generally be expected to offset increased commuting costs. In addition, indications are that job growth in both industry and retail trade will continue to be greatest in the outer suburbs, encouraging further outmigration.

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[1] For data on service costs in cities with declining population, see Thomas Muller, "Financing Education and Policy Services in Revitalizing Cities, Herrington J. Bryce, ed., Lexington Books, 1979.

Inner suburbs, particularly those physically contiguous to predominantly non-white areas of the central city, gained minority population during the 1970s. This trend should continue into the 1980s. Some inner suburbs, however, will be "rediscovered" by smaller, more affluent non-minority households seeking to take advantage of both a sound housing stock and the employment opportunities offered by the central city.

The aging of the metropolitan population, contrary to some expectation, will have little impact on rates of outmigration in the early 1980s as the number of persons most likaly to migrate—those between the ages of 18 and 34—will actually increase. However, several factors can counter this movement: availability of mass transit in central cities; fewer households with school age children and rising housing prices in the suburbs. In the late 1980s, the number of persons in the high mobility age group will stabilize.

4. Inter-Regional Trends

The Total Population

Although the inter-regional migration data for the 1970-75 and 1975-78 periods are not directly comparable, it appears that the total United States population registered a slightly decreasing propensity toward inter-regional migration between 1970 and 1978. At the regional level, the rate of net outmigration from both the Northeast and North Central states remained constant (see Appendix A, Tables 2 and 3). By contrast, the South and West both experienced net inmigration, though at decreasing rates. For both periods, the average annual rate of net inmigration into the South (0.6% during 1970-75 and 0.5% during 1975-78) exceeded that of the West (0.4% and 0.3% during 1970-75 and 1975-78, respectively), making the South the largest net recipient of inter-regional migrants. Nonetheless, the rates of net inmigration into both the South and West during the 1970s attest to the desirability of a "Sunbelt address."

Minority Population

In contrast to the overall pattern of decreasing net inter-regional migration, distribution of the migrating population by race as well as by region during the 1970-75 and 1975-78 periods reveals some variation in the rate, direction, and probability of such movement (see Appendix A. Tables 4 and 5). During the first period, for example, the probability of net immigration to the South and net outmigration from the Northeast and North Central states was higher among whites than blacks, while the likelihood of net immigration to the West was greater for blacks. During the 1975-78 period, however, the probability of net migration generally increased among blacks while at the same time, it decreased among whites. In fact, although the level of black net immigration to the South remained marginal, (it increased only slightly between 1975-78 compared to the earlier period) it reversed the trend of net outmigration of blacks observed in previous decades. A somewhat surprising statistic is the high movement of blacks to the West, exceeding the rate of white migration. Between 1960 and 1975, the proportion of black to total population in western states increased by about 35%, but declined in the South—the only region where the proportion of blacks declined during the 15-year time period. Although the black population base in the West during 1960 was small, the pattern indicates more regional racial balance in the coming decade than existed in earlier periods.

Projections for the 1980s

As stated earlier, rates of inter-regional migration are associated with a number of factors, including age, income and race. Considering only one factor—age distribution—the rate of inter-regional migration during the 1980s should not differ from that of the 1970s if current mobility trends continue. The national population is projected to increase by about 15% between 1975 and 1990, and the number of inter-regional moves should increase by the same percentage.

The Bureau of the Census projects total population change by state and region based on past trends. However, the data do not distinguish between net internal migration and foreign immigration. Total net migration—both internal and foreign—by region for the 1970-1975 period is shown in Table II-9. This table shows that total net migration to the South and West exceeded outmigration for northern states by 2.4 million, an amount representing immigration from other countries. By subtracting net internal regional migration from total migration, the level of immigration by region can be estimated. Population growth as a result of immigration is the largest in the West and Northeast, with North Central states receiving few immigrants.[1/] The Census projections are disaggregated by net internal and total migration by applying the 1970-1975 ratios. As these data show, the Census anticipates lower levels of net migration to the West during the 1980s than was registered in the 1970s, while net migration to the South is expected to remain unchanged.

5. Metropolitan/Non-Metropolitan Trends and Projections

Shifts in the metropolitan/non-metropolitan distribution of the total population are dependent not only on the traditional components of population change (natural increase and net migration) but also on changes in the number of counties classified as metropolitan and non-metropolitan. According to the U.S. Bureau of the Census, the population in the 243 metropolitan areas (SMSAs) so designated in 1970 represented 67% of the total 1970 population. However, the designation of both additional metropolitan areas and the expansion of existing SMSAs raised the metropolitan population to 72% of the 1977 population. For purposes of comparison, however, the number of metropolitan areas and their boundaries were held constant at 1970 levels between 1970 and 1977.

[1/] Northeast immigration is concentrated in New York City and nearby jurisdictions.

TABLE II-9

PROJECTED NET INTERNAL INTER-REGIONAL MIGRATION BY REGION[1/]
(in thousands)

Region	1970-1975	1975-1980	1980-1985	1985-1990
Northeast	-1342	-1076	-1019	-974
North Central	-1195	-1250	-1176	-1102
South	1829	1783	1777	1765
West	708	542	416	308

SOURCE: Derived from U.S. Bureau of the Census, Illustrative Projections of State Populations by Age, Race, Sex: 1975-2000, P-25, No. 796, March 1979.

As shown in Table II-10, the total non-metropolitan population increased by almost 11% between 1970 and 1977 in contrast to the 4% increase realized by the metropolitan population. These growth rates, it should be noted, mark a sharp reversal in a long-established trend that saw the rate of metropolitan growth exceed that of non-metropolitan areas during the 1950s and 1960s. Indeed, based on current trends, non-metropolitan growth can be expected to continue to exceed metropolitan growth during the 1980s. The most dramatic increase in the metropolitan population, however, occurred in counties designated metropolitan since 1970. In these counties located at the urban fringe, the population grew from 8.4 million to 10 million residents or by 19.2%, while the population of all other non-metropolitan counties increased by 9.4%.

[1/] Excludes Emigrants. These persons migrate primarily to the Northeast, Southwest, and West.

TABLE II-10

METROPOLITAN/NON-METROPOLITAN POPULATION CHANGE 1/

(in thousands)

Type of Residence	1960 2/	1970	Percent Change 1960-70	1977	Percent Change 1970-77
U.S. Total	178,700	199,819	11.8%	212,566	6.4%
Metropolitan	112,400	137,058	21.9	143,107	4.4
Central Cities	57,800	62,876	8.8	59,993 3/	-4.6
Suburbs	54,600	74,182	35.9	83,114	12.0
Non-Metropolitan	66,300	67,761	2.2	69,459	2.5

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1974 and 1970, 1977 and 1970, P-23, Nos. 55 and 75, September 1975 and November 1978, respectively.

U.S. Bureau of the Census, Trends in Social and Economic Conditions in Metropolitan Areas, P-23, No. 27, February 1969.

1/ The number of metropolitan areas and their boundaries were held constant at 243 between 1970 and 1977. Population estimates exclude members of the Armed Forces and institutionalized persons.

2/ The number of metropolitan areas in 1960 was 212.

3/ This population estimate is lower than shown in Table II-3.

Disaggregation of the non-metropolitan population by race discloses that the white population grew by 10.3% during the 1970 to 1977 period whereas the black population increased by 12.5%. In numerical terms, the white population grew by 5.9 million persons (from 56.3 million to 62.2 million) compared to 0.7 million persons (from 5.7 million to 6.4 million) for the black population. However, as the metropolitan/non-metropolitan migration data in the table below indicate, the increase in the black non-metropolitan population was due to natural increase rather than to non-metropolitan relocation. In fact, the immigration of about 0.8 million blacks to the suburbs totally accounted for the black outward movement from central cities.

NET MIGRATION BY RACE BETWEEN 1970 AND 1977
BY TYPE OF RESIDENCE AND RACE
(in millions)

Type of Residence	White	Black
Metropolitan Areas	-2.4	0.1
Central Cities	-9.5	-0.7
Suburbs	7.1	0.8
Non-Metropolitan Areas	2.4	-0.1

SOURCE: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Non-Metropolitan Population: 1977 and 1977, P-23, No. 75, November 1978.

In contrast to the nation's central cities which experienced a 1.9% decline in the number of family households, the number of family households in non-metropolitan areas increased from 16.1 million to 18.7 million—or by 16.1%—between 1970 and 1977. The increase in the number of non-family households in non-metropolitan areas registered an even sharper rise of 42.9%, growing from 3.5 million to 5.0 million. In a departure from central city trends of the 1970s, the number of both white and black non-metropolitan families with children under age 18 increased by 10.8% and 22.4%, respectively.

Household movement into non-metropolitan areas can be disaggregated into moves to the urban periphery and moves to smaller cities and basically rural areas. The most rapid movement occurred among households relocating to counties which became metropolitan since 1970. The rate of household relocation to rural counties (those with no place exceeding 2,500 residents) was substantial, indicating that the outward movement was not limited only to areas close to SMSAs.

The movement of households to non-metropolitan areas can be expected to continue as more industry moves outward from metropolitan areas. In part, this is attributable to the 12 percent lower cost of living outside SMSAs based on the Consumer Price Index (CPI). In fact, recent trends illustrated in the table below suggest that metropolitan/non-metropolitan cost of living differentials increased slightly between 1967 and 1978. 1/ While gasoline prices will make commuting to the urban core more expensive, expansion of industry in smaller communities would reduce commuting costs for those residents employed in industries near their place of residence. Therefore, the net locational effects of higher transportation costs for households residing in non-metropolitan areas are difficult to assess.

1/ For an intermediate budget for a four-person family.

METROPOLITAN/NON-METROPOLITAN COST OF LIVING: 1967 and 1978

	1967	1978	Percent Change 1967-1978
Metropolitan	$9,243	$18,982	105%
Non-Metropolitan	8,322	17,016	104%
Percent Non-Metropolitan of Metropolitan	90%	89.6%	—

SOURCE: U.S. Bureau of the Census, Statistical Abstract of the United States, 1969, 1980.

The growth in non-metropolitan areas has several implications. The continuing movement from areas of high density to low density implies that the share of population residing in central cities and inner suburbs will continue to decline during the 1980s, thus reducing the economic and political importance of such areas. The trend in outward movement also implies that central cities will be competing in the 1980s with both suburbs and non-metropolitan areas for new industry and jobs as the economic advantages of a central location serving a close-in market are reduced. For these reasons, the movement to non-metropolitan areas will affect distressed central cities adversely.

APPENDIX A

Table 1

AVERAGE ANNUAL NUMBER OF TOTAL U.S. MOVERS INTO/OUT OF CENTRAL CITIES BY AGE: 1970-75 (In Millions)[1]

Age	Average Annual Number Moves Out	Percent Total U.S. Age Group	Average Annual Number Moves In	Percent Total U.S. Age Group	Average Annual Number Net Moves
5-14	-0.58	-1.42%	0.22	0.54%	-0.36
15-19	-0.20	-1.04	0.10	0.52	-0.10
20-24	-0.30	-1.74	0.26	1.52	-0.004
25-34	-0.76	-3.00	0.32	1.26	-0.44
35-44	-0.34	-1.30	0.12	0.44	-0.20
45-64	-0.32	-0.76	0.12	0.28	-0.20
65+	-0.20	-1.00	0.05	0.24	-0.15
Total/Average	-2.66	-1.42	1.18	0.62	-1.48

Source: U.S. Bureau of the Census, Mobility of the Population of the United States March 1970 to March 1975, P-20, No. 285, October 1975.

AVERAGE ANNUAL NUMBER OF MOVERS INTO/OUT OF CENTRAL CITIES BY AGE: 1975-78 (In Millions)[1]

Age	Average Annual Number Moves Out	Percent Total U.S. Age Group	Average Annual Number Moves In	Percent Total U.S. Age Group	Average Annual Number Net Moves
5-14	-0.60	-1.6%	0.26	0.70%	-0.34
15-19	-0.20	-0.96	0.13	0.63	-0.07
20-24	-0.50	-2.60	0.40	2.10	-0.10
25-34	-1.00	-3.23	0.46	1.50	-0.53
35-44	-0.30	-1.46	0.17	0.73	-0.17
45-64	-0.36	-0.83	0.20	0.46	-0.17
65+	-0.13	-0.60	0.07	0.30	-0.07
Total/Average	-3.13	-1.60	1.70	0.87	-1.43

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1. Excludes movers from abroad.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 2

NET INTER-REGIONAL MIGRATION TOTAL U. S. POPULATION MARCH 1970-MARCH 1975 (In Thousands)

(population excludes persons under 5 years of age)

Region	Total Inmigration	Total Outmigration	Net Migration	Percent Migration Per Annum[1]
Northeast	1057	-2399	-1342	-0.54
North Central	1731	-2926	-1195	-0.42
South	4082	-2253	1829	0.58
West	2347	-1639	708	0.41

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1. For regional totals, see Appendix A, Table 6.

Source: U.S. Bureau of the Census, _Mobility Status of the Population of the United States March 1970 to March 1975_, P-20, No. 285, October 1975.

Table 3

NET INTER-REGIONAL MIGRATION--TOTAL U. S. POPULATION MARCH 1975-MARCH 1978 (In Thousands)

(population excludes persons under 3 years of age)

Region	Total Inmigration	Total Outmigration	Net Migration	Percent Migration Per Annum[1]
Northeast	876	-1575	-699	-0.47
North Central	1483	-2171	-688	-0.40
South	2881	-1871	1010	0.50
West	1901	-1524	377	0.33

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1. For regional totals, see Appendix A, Table 6.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 4

NET INTER-REGIONAL MIGRATION BY RACE March 1970-March 1975

(in thousands)

(population excludes persons under 5 years of age)

White

	Total Immigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	920	-2160	-1240	-0.6
North Central	1569	-2714	-1145	-0.4
South	3730	-1939	1791	0.7
West	2155	-1561	594	0.4

Black

	Total Immigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	118	-182	-64	-0.3
North Central	150	-202	-52	-0.2
South	302	-288	14	0.02
West	153	-51	102	1.2

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[1] For regional totals, see Appendix A, Table 7.

Source: U.S. Bureau of the Census, *Mobility of the Population of the United States, March 1970 to March 1975*, P-20, No. 285, October 1975.

Table 5

NET INTER-REGIONAL MIGRATION BY RACE--March 1975-March 1978

(In Thousands)

(population excludes persons under 3 years of age)

	White			
	Total Immigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	792	-1362	-570	-0.4
North Central	1308	-1964	-656	-0.4
South	2573	-1605	968	0.6
West	1670	-1412	258	0.3

	Black			
	Total Immigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	61	-176	-115	-0.8
North Central	154	-161	-7	-0.03
South	270	-244	26	0.07
West	181	-85	96	1.6

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1. For regional totals, see Appendix A, Table 7.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 6

(In Thousands)

REGIONAL POPULATION OF THE U.S. 1970 AND 1975

Region	1970	1975
Northeast	49,157	49,456
North Central	56,673	57,636
South	63,032	68,041
West	34,948	37,900

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1977.

Table 7

(In Thousands)

REGIONAL POPULATION OF THE U.S BY RACE 1970 AND 1975

	White		Black	
Region	1970	1975	1970	1975
Northeast	44,416	44,249	4,346	4,736
North Central	51,717	52,283	4,570	4,926
South	50,492	54,702	11,973	12,815
West	31,533	33,907	1,699	1,959
Total	178,158	185,141	22,589	24,435

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1977.

III. ECONOMIC PROJECTIONS

While the demand for housing, public services, and social services in the 1980s will be conditioned primarily by the demographic factors discussed in earlier sections, the ability of the public and private sectors to respond to this demand depends on both the level and distribution of economic growth during the decade. This section discusses both projected income and employment expansion based on the results of quantitative models which reflect current and anticipated conditions, particularly energy costs.

1. The National Economy

The aggregate level of economic growth during the 1980s will affect the demand for housing, the fiscal condition of urban centers, regional economic development, and other areas of concern to the nation. Unlike demographic patterns, however, economic conditions are subject to substantial short-term cyclical fluctuation and uncertainty. International conditions, including the availability and price of imported oil, will have a greater impact on national income growth rates during the 1980s than in any other decade since World War II.

Based on a review of various economic projections, we are applying what was initially labeled as the "energy constraint and oil price rise scenario" developed by the Joint Economic Committee of the U.S. Congress.[1] This scenario was only one of several prepared in May 1979 and was based on several assumptions which, on the basis of changes between mid-year 1979 and early 1980, appear to reflect most closely both current and future conditions.[2]

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[1] Joint Economic Committee, Midyear Review of the Economy: The Outlook for 1979, August 1979.

[2] At the time the JEC report was prepared, this scenario was one of two pessimistic projections. The sharp rise in the price of oil during late 1979 and early 1980 was not projected as probable.

The scenario assumes that the price of imported oil will rise annually at a rate 20 percent faster than the general inflation rate and that domestic consumption of oil will be constrained to 19 million barrels per day. If the oil price increases realized during December 1979 and January 1980 reflect future trends, the "energy constraint and oil price rise" scenario appears somewhat optimistic. Indeed, these recent prices represent a rise equal to over two years of projected increases based on an annual consumer price index growth of 8.7 percent between 1980 and 1984.[1] In the view of the JEC staff which prepared the projections, the use of this scenario as "the most likely" is reasonable based on current (January 1978) information.

Changes in economic activity based on the JEC economic projections are shown in Table III-1. The GNP is expected to grow (in 1972 dollars) from $1,457 billion in 1980 to $1,901 billion in 1990, or by 31 percent during the period. This growth is slower than that experienced in the 1960-1970 time frame and somewhat lower than the average annual 3.5 percent GNP increase between 1970 and 1979.[2] Inflation rates are also projected to be higher than during the 1970s, with total disposable income growing by 24 percent, a rate considerably less than that of the 1970s. Much of the relative decline in disposable income is traceable to projected low productivity gains and the reduced rate of economic growth between 1985 and 1990, owing partially to the slower expansion of the labor force.[3] If energy prices continue to rise at

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[1] The base line price per barrel of oil (May 1979) was $21, with January 1980 prices about $35, a 67 percent increase in six months.

[2] GNP in 1970 (in 1972 dollars) was $1,075 billion, in the second quarter of 1978, $1,383 billion.

[3] Productivity gains are estimated at between 1.5 and 2.1 percent annually between 1979-1984 and 2.0 to 2.4 percent between 1984 and 1987. Differences in growth rates depend primarily on assumptions regarding changes in labor quality.

Table III-1

PERCENT CHANGE IN ECONOMIC ACTIVITY

(In constant dollars for each period shown)

	1980-1985	1985-1990	1980-1990
Gross National Product	16.2%	12.4%	30.6%
Total Disposable Income	14.2%	8.9%	24.2%
Per Capita Disposable Income[1]	8.9%	4.1%	13.3%
Household Disposable Income[2]	3.0%	0.2%	3.3%
Inflation Rate (CPI)	8.7%[3]	9.6%[3]	-
Average Interest Rate (Prime)	10.8%[3]	8.9%[3]	-
Productivity Growth (Low Growth Path)	1.5%[3]	2.0%[3]	-

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1. Population estimates for 1980, 1985, and 1990 are based on Series II projections used in U.S. Bureau of the Census, Population Estimates and Projections, P-25, No. 704, July 1977.

2. Based on New Series B household projections. Use of Series D increases income slightly.

3. Annual rates.

Source: Based on economic projections labeled "Energy Supply Curtailment and Price Increase," by Douglas Lee, Economist, Joint Economic Committee (unpublished).

the June 1979 and January 1980 rate of increase, the projected modest GNP growth may be further reduced.

The JEC projects high inflation rates in the early 1980s as a result of high oil prices. The prime interest rate is also shown to be high, exceeding the inflation rate in the early 1980s. Projected JEC household income and inflation rates correspond closely to The Urban Institute's estimates for the same time period as shown below. The Urban Institute also estimates that construction costs, in real terms, will rise more rapidly than personal income. If Institute projections are correct, households will have to allocate a larger share of their income to shelter costs or reduce their housing consumption.

ANNUAL CHANGES IN ECONOMIC CHARACTERISTICS DURING 1980s
(In constant dollars)

Variable	JEC Model	Urban Institute Model Optimistic	Pessimistic	Mid Point
Household Income	0.6%[1]	1.4	0	0.7
Inflation Rate	8.7%	7.5	10.0	8.8
Construction Rate	-	1.9	2.7	2.3

1. Disposable household income 1980-1985 (See Table III-1).

Source: For The Urban Institute projections, see John Weicher, "National Housing Need and Quality Changes," Working Paper 1345-3, January 1980.

While the economic projections for the second half of the 1980s suggest only limited economic growth, events which cannot be predicted at this time could change these estimates. These events include the following:

- Discovery of substantial oil and gas reserves at recovery costs at or below current import levels.
- Higher than projected productivity gains due to technological and labor quality improvements.
- Increased defense-related outlays which would necessitate a reallocation of resources among the various sectors of industry and thus require a re-examination of current economic projections.
- Conservation of energy resources at rates above projected levels.

At the beginning of this decade, no one could have projected a tenfold increase in oil prices, current international tensions, or other events which influence economic growth. In the judgment of the authors, technological improvements will reduce our dependence on imported oil in the late 1980s which will, in turn, cause income growth to exceed current projections. Several factors lead to such an observation, including the following:

- Large outlays for the exploration of new oil fields, with promising recent finds in Canadian and Mexican waters, could reduce our dependence on oil from less reliable sources.
- Substantial outlays for the development of new energy-related technologies could permit more efficient means of converting ample resources such as coal into other energy forms.
- Large-scale substitution of coal and other energy sources for oil could increase the availability of gasoline, while more efficient automobile design and engines could mean greater conservation of energy sources.

While none of the above events can be determined with certainty, these factors share a common characteristic: the occurrence of one or a combination of events will produce no significant impact on the general economy until the late 1980s. In our view, projections for the 1985-1990 period should be considered conservative.

2. Income Trends

The 1970s present a sharp contrast to the 1960s in the level of well-being among most Americans. While data for the earlier decade indicate substantial net income increases among households of all races and income groups, gains during the 1970s were typically small, and for non-white families, practically nonexistent.[1] The gap in median income between races narrowed during the 1960s by about 14 percent, but widened somewhat during the 1970s. Gains during the 1970s for all races tended to be among the upper income levels and the poor, with the proportion of families below the poverty level declining slowly (See Tables III-2A, 2B, 2C).

The income of the typical American family peaked in 1973 and again in 1978, with real income falling in 1979 due to high inflation rates. At the regional level, income in the South increased more rapidly than in the other regions, while income growth in the Northeast stagnated. These differences are reflected in the migration patterns described in the previous section. As shown in Table III-3A, family income decreased in both cities and suburbs between 1970 and 1977. Although losses in suburbs were nominal, the city-suburban gap increased;[2] indeed, family income increased only in nonmetropolitan areas. Differences in income between cities and suburbs could be attributed to several factors, including (1) racial composition--the

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[1] The 1970s in this section, unless noted otherwise, refers to the 1970-1977 time period for which complete data are available. Preliminary data for 1978 indicate that the median income for all families increased by 2.4 percent in 1978, but in large cities by only 0.6 percent and in the Northeast by 0.6 percent.

[2] This is attributable in part to the outmigration from cities of households with above average income.

Table III-2A

MEDIAN FAMILY MONEY INCOME 1960-1977
(In 1977 dollars)

	1960	1970	% Change 1960-1970	1977	% Change 1970-1977
Median Family Income:					
All Families	$11,500	$15,399	33.8%	$16,099	4.5%
Non-White Families	$ 6,610	$10,169	53.8%	$10,142	-0.3%

Table III-2B

FAMILY INCOME BY INCOME GROUP 1960-1977
(In 1977 dollars)

	1960	1970	% Change 1960-1970	1977	% Change 1970-1977
All Races:					
Percent Below $10,000	37.7	27.7	-26.5	27.4	-1.1
Percent Above $25,000	8.0	19.3	141.3	22.4	16.1
Non-White:					
Percent Below $10,000	69.9	49.4	-29.3	49.4	0
Percent Above $25,000	1.7	8.4	394.1	10.8	28.5

Table III-2C

POVERTY RATE BY RACE 1959-1977

	1959	1970	% Change 1959-1970	1977	% Change 1970-1977
Percent Poverty All Races	22.4	12.6	-43.8	11.6	-7.9
Percent Poverty Blacks	55.1	33.5	-39.2	31.3	-6.6

Source: U.S. Bureau of the Census, Consumer Income, P-60.

Table III-3A

CHANGES IN FAMILY INCOME, 1970-1977
(In 1976 dollars)

	Central Cities	Suburbs	Nonmetropolitan Areas
Median Income			
1970	$14,566	$17,160	$11,931
1977	13,956	17,101	12,831
Percent Change	-2.7%	-0.3%	7.5%
Mean Income			
1970	$16,566	$19,766	$13,618
1977	16,017	19,405	14,544
Percent Change	-5.4%	-1.8%	6.9%

Table III-3B

CHANGES IN FAMILY INCOME BY REGION

	Median Income		
	1970	1977	Percent Change
Northeast	$16,692	$16,804	0.7%
North Central	16,117	16,848	4.0%
South	13,346	14,567	9.1%
West	16,032	16,512	3.0%

Source: U. S. Bureau of the Census, Money, Income and Poverty Status of Families and Persons in the United States: 1977, P-60, No. 116.

income of black families concentrated in central cities was $10,142 (in 1977 dollars) compared to $16,099 for all families; (2) higher percentage of female-headed families in cities; (3) greater dependence on transfer payments; and (4) lower labor participation rates in cities. The proportion of the total poverty population residing in cities increased from 34 percent in 1970 to 38 percent in 1978.

3. Income Projections for the 1980s

Between 1970 and 1978 the number of households in the middle income group--those earning between $12,000 and $25,000 (in 1978 dollars)--remained constant, but declined by 9 percent as a share of all households. The number of households earning less than $12,000 increased by over one million, while the number of households earning over $25,000 increased by over 4 million. These statistics suggest that income gains during the 1970s were concentrated in the higher income groups, with little gain in the lower and middle income categories. Since the economy is likely to grow somewhat more slowly in the 1980s compared to the 1970s, there is reason to believe that a similar pattern of income growth will prevail during the decade. This would mean small decreases in discretionary income for moderate income families during the decade.

Income gains will be concentrated in small metropolitan and nonmetropolitan areas, continuing the trend of the late 1970s. In particular, mean family income in nonmetropolitan areas increase by 7 percent between 1970 and 1977 while metropolitan income declined. Families formerly residing in the urban core no doubt took advantage of increased employment opportunities in nonmetropolitan areas. Indeed, the income of nonmetropolitan families tended to increase with size of the largest city in the county. For example, the 1976 median income of nometropolitan families living in rural counties was only $11,400. By contrast, the 1976 median income of nonmetropolitan families residing in counties with a place of 25,000 or more population was $14,000, an amount identical to the 1976 median income of all city families.

Income, particularly from earnings, will be reduced in larger, distressed manufacturing-based northern cities.[1] This projected trend is attributable to the prospect for fiercer international competition for manufacturing products, a continuation of reduced manufacturing employment in older cities, and the attractiveness of outer suburban and nonmetropolitan areas for industrial expansion. As a result, earnings in cities for two high wage sectors--manufacturing and construction--will be adversely affected.

At the regional level, gains in household income during the 1980s will be primarily limited to western and some southern states. The relatively more favorable condition of these states can be traced to energy availability, climate, capital investment, long-term migration patterns, and a newer and more efficient industrial structure. Although high rates of inflation and thus interest will discourage capital formation, available capital will flow to southern and western regions from other parts of the nation.

Income change by race will depend on the growth of the national economy. In periods of growth, as during the 1960s, and in 1972 and 1978, the income of black households increased, but it remained stable or decreased in other years during the decade. In the absence of rapid growth periods during the 1980s, there is no reason to believe that income levels across races will

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1. Based on such criteria as income and unemployment, the most economically distressed cities are Newark, Paterson, Camden, Jersey City, Buffalo, Bridgeport and Detroit, cities with large industrial sectors. For comparison of cities with weak and strong economies see Thomas Muller, "Financing Education and Police Services," in Herrington J. Bryce, ed., Revitalizing Cities, 1979.

converge, although the proportion of minorities in the upper income brackets should continue to rise.

4. Implications of Economic Growth Projections Regional Mobility Patterns

If, as projected, the 1980s become a decade of slow economic growth, what are the implications on migration rates and population distribution?

Historically, periods of low economic activity have a dampening effect on mobility, since employment opportunities and the ability of households to afford relocation become limited. Despite the absence of net income growth in the 1980s,a period of considerable job expansion is expected, although at rates below those of the late 1970s. This could mean that employment opportunities, discussed in a subsequent section, will not be severely limited. Nevertheless, since the propensity to migrate is related to income (higher income persons except those over 65 years old are more likely to move), projected low growth rates will probably reduce the level of migration somewhat during the 1980s and early 1990s. Additional defense-related outlays, however, would contribute to regional shifts since such outlays are currently concentrated in the South and West and are likely to remain concentrated in these regions.

While Census projections of outmigration from northern states appear reasonable (See Table II-8), projected sharp increases in the price of oil, which also affect the price of other energy sources such as coal, natural gas and uranium, should induce higher than projected levels of migration to the West and lower levels to the Southeast.[1] The concentration of energy sources in western and southwestern states should provide an incentive for increased migration to these states for the following reasons:

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[1] This assumes no price control of these resources.

- Massive capital investment in energy-related resources, creating additional employment opportunities in construction.
- Added state revenue projected at $35 billion over a ten year period from fossil fuel ownership and taxes on fossil fuel extraction. These added revenues will reduce effective tax rates in such states as California, Colorado, Montana, and Texas.
- Accessibility to energy resources for industrial uses.

These factors should place western and southwestern states at a comparative advantage relative to other regions.

In addition, western and southwestern states, areas which receive a large percentage of legal and illegal immigrants from other nations, can expect higher levels of immigration as a result of poor economic conditions and political instability in other areas of the world and expanding employment opportunities concentrated in these regions. One factor which could partially offset the attraction of these states to internal migrants from other regions, however, is the slowly rising cost of living relative to that of northern metropolitan areas. Historically, the cost of living in southern urban areas has been substantially lower than that of northern urban areas, owing primarily to higher taxes in northern cities. In recent years, though, there has been a minor convergence between the "Sunbelt" and other states in the cost of such items as housing. For example, average housing costs increased somewhat more rapidly in Houston and Portland and in California cities than in northern urban areas.

While wages in southern states for selected occupations in manufacturing and offices are typically lower compared to other regions, these differences remain considerably smaller than regional variations in the cost of living. In some occupations, there are no wage differences whatsoever between the Northeast and South.[1] Thus, the comparative economic advantage of living outside northern metropolitan areas continued during the 1970s and is likely to continue based on recent trends.

Projections for the 1980s indicate that the rate of outmigration from central cities to suburbs should be reduced modestly. One factor which historically caused outward movement was the rising standard of living which, in turn, enabled more city-born families to purchase large, detached housing units in suburban areas. Massive improvements in the highway system, the availability of mortgage loans at low interest rates and other factors contributed to this suburban shift. Slow rates of economic growth projected for the 1980s, expected high interest rates, and the near completion of the interstate highway system should dampen the incentive for suburban movement. These forces, however, are insufficient to offset completely other pressures which cause families with children to move out of central cities, including problems with city schools and a continuing preference for single-family, detached housing.

Urban Poverty

Although overall poverty rates declined somewhat during the 1970s, the number of households below the poverty level became increasingly concentrated in central cities. Evidently, the national economy did not expand sufficiently to reduce poverty substantially despite added employment opportunities and a sharp rise in transfer payments in older cities. Since income growth in the 1980s is projected to be somewhat lower compared to the 1970s, it is unlikely that urban poverty rates will be reduced. While there could be small reductions in poverty rates if transfer payments increase in real terms, there are presently no indications that such increases, necessitating higher taxes, will occur.

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[1] For example, for typists, accounting clerks, and computer operators in manufacturing, see Bureau of Labor Statistics, Handbook of Labor Statistics, Bulletin 1966.

One indication of potentially higher poverty rates is the projected increase in the number of female-headed families. These families constitute 50 percent of all families below the poverty level and 75 percent of all low-income black families. In fact, almost one out of three female-headed households is below the poverty level, with the percentage among minorities in excess of 50 percent. The extent to which the number of female-headed family will increase depends on the household formation series selected as shown below:

FEMALE-HEADED FAMILIES
(In Millions)

	No. Households		No. Female-Headed Households		No. Below Poverty Level		
Census Series	1978	1990	1978	1990	1978	1990	% Change
Series B	76.0	96.6	8.0	116.5	2.6	5.3	104%
Series D	76.0	92.4	8.0	12.0	2.6	3.8	46%

Source: U.S. Bureau of the Census, Projections of the Number of Households and Families: 1979 to 1995, P-25, No. 805, May 1979.

The number of female-headed households with income below the poverty level will increase by 1.2 million to 2.7 million between 1978 and 1990.

5. Employment

Recent Trends

During the 1970s, the labor force expanded more rapidly than most experts projected: from 85.9 million in 1970 to 105.1 million in late 1979—a 22 percent increase during the nine year period. Since the rate of overall employment growth exceeded the rate at which young persons entered the labor market, the labor participation rate increased from 61 percent to over 64 percent. Employment in the local and state sector also expanded more rapidly than the private economy until the mid 1970s.

Although employment increased by over 19 million workers, there was substantial variation by industry category. Three sectors led the rise: services (39.1 percent), retail trade (31.8 percent), and state and local government (29.6 percent) and accounted for over 70 percent of all employment expansion. These sectors are labor-intensive and have shown only moderate productivity gains in the past.

Job expansion in the 1970-1978 period duplicated the general trends of the 1960s albeit with growth in the professional, white collar, and technical categories somewhat reduced. At the regional level, the rate of job expansion in the South and West was twice that of northern states during the 1960s. Between 1970 and 1978, however, the regional growth differentials exceeded their 1960s levels and saw most new jobs created outside northern states (See Table below).

Substantial job growth differences by race were observed during the 1960s. Non-whites increased their share of white collar jobs more rapidly than whites, although a substantial absolute gap remained at the end of the

NON-AGRICULTURAL EMPLOYMENT CHANGES BY REGION 1970-1978[1]

(In millions)

	1970	1978	Change 1970-1978
New England	4.5	5.2	0.7
Middle Atlantic	14.1	14.3[1]	0.2
East N. Central	14.6	16.7	2.1
West N. Central	5.4	6.7	1.3
South Atlantic	10.5	13.6	3.1
East S. Central	3.8	5.1	1.3
West S. Central	6.0	8.4	2.4
Mountain	2.7	4.1	1.4
Pacific	9.1	12.3	3.2

1. 1977 data.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

decade. However, the dramatic increase in the number of professional jobs for non-whites during the 1960s was no longer evident during the 1970s. Instead, blacks gained jobs in the medical and other health fields and as salaried managers during the 1970s, while their share of service jobs, a sector in which wages are typically low, remained twice that of whites.

Jobs in Metropolitan and Nonmetropolitan Areas

While employment nationally expanded substantially during the 1970s, residents of large central cities did not participate in the expansion. In fact, the central city residents' share of all jobs declined from 32.7 percent to 27.9 percent, a rate faster than the central city share of the population change.[1] In 1977, for the first time, the ratio of resident job holders to the resident total central city population declined below the national average.[2] As shown below, large cities realized a 7 percent decline, while the proportion of suburban and nonmetropolitan residents holding jobs in suburban and nonmetropolitan areas increased by 17 and 24 percent, respectively.

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[1] Data currently available are limited to the 1970-1977 period. Indications are that employment, as in New York City, expanded in 1978 and 1979.

[2] Since the proportion of commuters to and from central cities remained unchanged between 1970 and 1975, the job losses by city residents should represent employment losses in central cities regardless of worker residence.

RESIDENTS WITH JOBS IN METROPOLITAN AND NONMETROPOLITAN AREAS
(In millions)

Area	1970	1977	Percent Change
Large Cities[a]	13.6	12.7	-6.7
Smaller Cities	11.0	11.9	8.2
Suburbs of Central Cities	28.5	36.1	16.9
Non-Metro Area	22.1	27.5	24.4

a. Cities in SMSAs with more than 1 million residents.

Source: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1977 and 1970, P-23, No. 75, November 1978. Data are for area residents holding jobs.

Central city resident employment declined in all areas except "finance, insurance and real estate" and "business services," while public sector jobs remained stable. The losses occurred in manufacturing, followed by clerical and sales workers in retail trades (See Table III-4). Suburbs gained substantially in all categories, except manufacturing; the gains in this sector, however, offset most losses in central cities.

Projected Employment Levels and Distribution of Jobs

The Bureau of Labor Statistics, based on its "basic employment model," projects that job growth in the 1980s will be substantially lower than in the previous decade. It is estimated that total jobs will increase by 15.7 million, while unemployment rates will be low--in the 4 percent to 5 percent range (See Table III-5.) This unemployment rate is somewhat below that projected by the JEC. In fact, the BLS projection of a 5.4 percent unemployment rate in 1980 is below the actual January 1980 level, suggesting that the

Table III-4

JOB HOLDERS IN CITIES AND SUBURBS 1970-1977
(In millions)

	Cities			Suburbs		
	1970	1977	% Change	1970	1977	% Change
Manufacturing	5.9	5.1	-13.6%	7.9	8.5	7.6%
Construction	1.2	1.1	- 8.3	1.3	1.6	11.1
Wholesale Trade	1.2	1.1	- 8.3	1.3	1.6	23.1
Retail Trade--Clerical and Sales	1.7	1.5	-11.8	2.0	2.3	15.0
Finance, Insurance	1.6	1.7	6.3	1.5	2.2	46.7
Business Service	0.9	1.1	22.2	1.0	1.4	40.0
Personal Service	1.3	1.2	- 7.7	1.0	1.2	20.0
Public Administration	1.5	1.5	0.0	1.6	2.0	25.0

Source: U.S. Bureau of the Census, Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1977 and 1970, P-23, No. 75, November 1978.

Table III-5

LABOR FORCE CHANGE 1968-1990
(In millions)

	1968	1973	1977	1980	1985	1990
Total Labor Force	82.3	91.0	99.5	106.1	115.4	121.5
Unemployed	2.8	4.3	6.8	5.7	5.3	5.4
Employed	79.5	86.7	92.7	106.4	110.1	116.1
Unemployment Rate	3.4%	4.7%	6.8%	5.4%[1]	4.6%	4.4%

	Annual Rate of Change					
	1955-68	1968-73	1973-77	1977-80	1980-85	1985-90
Total Labor Force	1.5	2.0	2.3	2.1	1.6	1.1
Unemployed	-0.1	8.3	13.0	-5.6	-1.5	0.2
Employed	1.5	1.8	1.7	2.7	1.8	1.1

1. The actual unemployment rate in January 1980 was 6.1%, or above the level projected by the Department of Labor in 1977.

Source: N.C. Saunders, "The U.S. Economy to 1990: Two Projections for Growth," *Monthly Labor Review*, December 1978.

BLS unemployment rates have been underestimated. However, BLS employment growth of 1.8 percent annually between 1980-1985 and 1.1 prcent between 1985 and 1990 are consistent with the JEC model projections applied in this report in estimating income growth.[1] Thus, there is is reasonable consistency between the income and employment projections, despite some differences in unemployment rates.[2] Since population growth among persons 16 years of age and over will be only 1.0 percent annually in 1985 and 0.6 percent in 1990, labor participation rates should continue to rise.

The employment growth estimates discussed above should be considered conservative. Actual growth may need to be higher to sustain even the modest level of economic growth projected if productivity gains remain low and imported energy prices high. That is, more persons will have to be employed in order to maintain current living standards since disposable income per worker is not expected to increase.[3] However, higher employment rates would produce only a small positive impact on the GNP. Expansion of the 1990 employment level by 6.6 million workers (an increase of 42 percent over the "base employment" model during the ten year period) would increase the GNP by $83 billion, or an increase of only 12 percent over the lower employment growth scenario. The low incremental contribution of added employment is due to the fact that most added workers would be funded by taxes.[4]

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[1] JEC estimates 1.9 percent between 1979-1984 and 1.1 percent between 1984-1989. Thus, total employment would rise by over 16 million based on the low growth scenario.

[2] The BLS model, applied in 1977, estimates the average unemployment rate in the 1980s at about 4.8 percent, the JEC at about 7 percent.

[3] Between January 1979 and January 1980, real weekly wages per employee fell from $92.37 to $86.06 (in seasonally adjusted 1967 dollars).

[4] It is assumed by that 80 percent of the additional employment increases in the early 1980s would be absorbed into the state and local sector funded by federal grants.

During the 1980s, job growth will be concentrated primarily in the West and Southwest, followed by the South. This reflects the pattern of migration as well as the most recent employment data. Northern industrial states can be expected to realize only a slow rate of job expansion. Between 1977 and 1979, for example, the rate of job growth in California was four times as rapid as in New York State.

Office-related employment will rise, with some central city growth as urban centers should continue to be the focus of public sector jobs, employment related to public services, and business services. This is reflected in increased office and hotel construction within central cities during the latter part of the 1970s. However, the 1972-1978 period registered a decline in retail employment in older central cities, with substantial employment increases in suburban shopping centers.[1] The pattern of movement out of the CBD and other parts of central cities suggests that retail employment will, at best, remain stable in distressed central cities, but will grow substantially outside city boundaries. Retail-related employment such as wholesale services should also decline. At the same time, the manufacturing employment base in cities is continuing to decline, except in cities undertaking major annexation. As manufacturing facilities in northern cities age, they will probably be replaced by new facilities outside the urban core, thus continuing earlier trends.[2]

Growth by Occupation

During the 1980s, employment in all categories with the exception of private household and farm workers will grow. The most rapid growth rates

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1. See Thomas Muller, "Regional Malls and Central City Retail Sales--An Overview," Draft, The Urban Institute, 1979.

2. See Thomas Muller, "Central City Business Retention: Jobs, Taxes, and Investment Trends," Draft, Urban Roundtable, U.S. Department of Commerce, June 1978.

are projected for service workers, clerical workers, and sales workers. The Department of Labor projects that in addition to 19.6 million new jobs over the 12 year period, there will be 46.8 million replacement jobs; that is, openings due to deaths, retirements and other separations from the labor force. (See Table III-6). It should be noted that clerical and sales jobs in retail and wholesale trades have been declining in central cities. Service worker jobs, however, expanded in cities during the 1970s and should continue to do so during the current decade.

Table III-6

EMPLOYMENT GROWTH 1978-1990
(In millions)

Occupation Category	1978 Employment	Projected Employment 1990	Change 1978-1990	Percent of all New Employment
Professional and Technical	14.2	16.9	2.7	13.4
Managers, Administrators	10.1	12.2	2.1	10.4
Sales Workers	6.0	7.6	1.6	8.0
Clerical Workers	16.9	21.7	4.8	24.0
Craft Workers	12.4	14.9	2.5	12.4
Operators	10.9	12.5	1.6	8.0
Transport Operators	3.5	4.1	0.6	3.0
Non farm Workers	4.7	5.1	0.4	2.0
Service Workers	12.9	16.7	3.8	18.9
Total	91.6	111.7	20.1	100.0

Source: Bureau of Labor Statistics, News, USDL-79-903, December 1979.

IV. IMPACT OF PROJECTED ECONOMIC AND DEMOGRAPHIC TRENDS

Sections I, II and III discussed major trends in demography, migration, and economic development. Section IV considers how these changes will affect the level and type of demand that will be imposed on cities and other areas during the 1980s for housing, public services, and social services. Where possible, an attempt is made to differentiate between federal costs and those which must be borne by state and local government. Finally, prospects for metropolitan and regional economic development are assessed.

1. Housing

Total Demand

Determining the demand for new housing in the 1980s as a consequence of projected demographic and economic change is a major objective of this report. While annual housing supply and demand are difficult to estimate, aggregate demand in five year increments can be projected based on several assumptions. The two most important assumptions affecting the long-term demand for new housing are the household formation rate and the rate at which units are removed from the existing stock. During the 1960s, about 65 percent of the total demand was attributable to household formation, and the balance to losses in the previously existing stock. In recent years, one unit of housing was added for every 0.93 new households (See Table IV-1).[1] Thus, it is assumed that 1.075 units will be added to the housing stock for every new household formed.

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[1] The difference between households and units added is primarily attributable to year-round second homes (which almost one out of twenty households owns or rents) and vacancies.

Table IV-1

HOUSEHOLD - HOUSING UNIT RELATIONSHIP 1950-1978

Year	No. Households	Annual[a] Increase	Year-Around[b] Housing Units	Ratio Households/ Housing Units
1960	52,799	959	56,551	.934
1965	57,436	927	N/A	N/A
1970	63,401	1191	67,699	.936
1975	71,120	1544	N/A	N/A
1976	72,867	--	79,316	.919
1977	74,142	--	80,716	.918
1978	76,030	1637	N/A	N/A
1980	79,870	1642	86,260[c]	.926
1985	88,565	1739	95,650[c]	.926
1990	96,653	1618	104,385[c]	.926

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a. Average annual increase over preceding date.

b. Both occupied and unoccupied units.

c. Based on ratio of 1.08 year-around housing units per household.

Source: U.S. Bureau of the Census, Projection of the Number of Households and Families 1979-1995, P-25, No. 805, May 1979.

The demand for housing shown in Table IV-2 is based on two scenarios. The first is labeled "unconstrained supply"[1] and is derived from the Census Bureau's Revised Series B estimates of household formation. Revised Series B projects a decline in the proportion of husband-wife family households and a rapid increase in the number of non-family households with an average 1.2 persons per household.[2] The "unconstrained supply" scenario assumes that, in addition to losses by fire and other natural disasters, recent trends in housing replacement will continue and that additional inadequate housing units will be removed from the market.[3] The housing replacement rate, it should be noted, increased during the late 1970s to 815 thousand units per year. Housing removed in recent years was old (55 percent of all removals were built prior to 1939), and 21 percent consisted of mobile homes. Thus, only one out of four units replaced was a permanent structure built after 1940. Significantly, the replacement process removed a large percentage of substandard stock and should continue to do so if supply is unconstrained.[4]

Based on these assumptions, the total demand for housing would average 2.6 million units, including mobile homes.[5] The number of new units required to meet this demand would be over 2.4 million annually in the 1980-1985 period, substantially more than the average rate of construction during the 1970s. (See Table IV-2). However, this scenario assumes that

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[1] Unconstrained supply is defined as a condition under which housing supply can fully meet projected demands.

[2] The change in household formation is greater in projection Series "A" and "C." See U.S. Bureau of the Census, P-25, No. 805, May 1979.

[3] A recent study estimates annual net losses in the 1980s to be 0.94 percent of the 1980 housing stock, or 830 thousand units, close to the value assumed in this report. See John Weicher et al., "National Housing Need and Quality Changes During the 1980s," The Urban Institute, Working Paper 1345-3, January 1980.

[4] The number of units with insufficient or no plumbing was reduced sharply during the 1960s and 1970s.

[5] Midyear 5 Solution "Energy Supply Curtailment and Price Increase", Douglas Lee, JEC Staff, June 1979, (unpublished).

Table IV-2

THE DEMAND AND SUPPLY OF HOUSING--ALTERNATIVE SCENARIOS

Annual Housing Demand (In 000)

	U.I. Estimate Unconstrained Supply		U.I. Estimate Constrained Supply			
	Series B		Series B		Series D	
	1980-1985	1985-1990	1980-1985	1985-1990	1980-1985	1985-1990
New Household Formation[1]	1875	1747	1875	1747	1465[2]	1245[2]
Replacement	815[3]	815[3]	500	615	815[3]	815[3]
Total	2690	2562	2375	2362	2280	2060
Percent New Households of Total Demand	69.7%	68.2%	78.9%	74.0%	64.3%	73.5%
Housing Supply (In 000)						
Potential Supply	2690[5]	2562[5]	2324	2362	2274	2362
Mobile Homes	264	264	314	264	264	264
Other	2426	2298	2010	2098[4]	2010[4]	2098[4]

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1. Based on New Series B Census projections. Assumes ratio of 1.08 year-around units per household (includes vacancies).
2. Based on Series D Census projections. Assumes ratio of 1.04 units per household.
3. Based on average annual removal from housing stock between October 1973 and October 1977. A total of 3,262 thousand units were removed by demolition, disaster, or other means.
4. From JEC model scenario--energy supply limitations and price increases.
5. Includes mobile homes estimated at 264 thousand annually (average 1974-1978).

Source: U.S. Bureau of the Census, 1977 Survey of Housing.

supply side monetary and fiscal policies during the 1980s will be designed to stimulate housing construction. Such policies would permit higher interest rate payments by savings and loan associations, expanded use of tax exempt bonds by local governments, and other measures. Under these conditions, the supply of new housing would increase to meet demand.[1]

By contrast, the "constrained supply" scenario assumes a continuation of current monetary and fiscal policies. Given the trend toward high interest rates and low capital formation rates, the rate of housing construction, under the JEC model, is expected to average only about 2050 units annually during the 1980s, excluding mobile homes.[2]

The "constrained supply" scenario estimates household formation rates by applying both Series B and D projections. As noted in a previous section, Series B assumes a sharp reduction in the proportion of husband-wife households and a substantial increase in the number of non-family households. Based on this projection, it is likely that several factors will dampen the demand for housing units in the presence of supply constraints. Housing prices will rise and necessitate more "house sharing" among unrelated individuals, leading to fewer but larger households than the Census projects. The scenario further assumes that the number of existing units in need of replacement and actually removed will be reduced as more marginal housing is maintained and additional units rehabilitated. Finally, the proportion of households residing in mobile homes would reduce demand to a level close to that of the projected supply. It is important to note that under the "constrained supply" scenario only limited replacement is possible when Series B household growth rates are applied[1].

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[1] The Urban Institue model projects housing demands to be beween 2.20 and 2.87 milion units per year. See Weicher, op. cit.

[2] Midyear 5 solution "Energy Supply Curtailment and Price Increase", Douglas Lee, JEC Staff, June 1979, (unpublished).

The use of Series D projections which, as noted in Part I of this report, assume fewer households and larger household size than Series B, has a considerable impact on housing demand.[2] As shown in Table IV-2, the reduced number of households means that the number of units which can be constructed during the 1980-1985 period equals demand even if all units requiring replacement are removed from the housing stock. In the 1985-1990 period, there would actually be a surplus of new units which could accelerate the rate of replacement.

Based on these data, it is evident that a housing supply problem exists only if Series B projections clearly represent the actual rate of household formation. It should be further noted, however, that the replacement rate in the future may be higher than projected as housing built immediately after World War II begins to require replacement.

Housing Demand By Type

Housing can be grouped into owner occupied and renter occupied units. Typically, owner occupied housing is a single-family detached unit, while rental units tend to be smaller in size and part of attached multi-unit structures. Owner occupied units are concentrated outside older central cities and are predominantly occupied by white households. In addition to "traditional" units, mobile homes, usually owner occupied, form an increasingly large share of residential units, particularly outside SMSAs.

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[1] The Weicher study, op. cit., also assumes that Series B most clearly approximates demand.

[2] Given projected marriage and divorce rates, the use of Series D or some midpoint between B and D appears reasonable.

Based on the decline in household size from 3.33 persons in 1960 to 2.81 in 1978 (a 16 percent reduction) and a parallel decrease in family size, one would have expected a rise in the demand for smaller units. In fact, the demand did not materialize; instead, the typical unit built during the 1970s was larger and included more space and amenities than units built in prior years. The demand for larger units has taken place despite price rises for single-family housing which exceeded the Cost of Living rise by several percentage points.

Rising income cannot explain this phenomenon, since household income increased only marginally.[1] It is evident, therefore, that other factors influenced the demand for larger units. The purchase of housing as an investment, in addition to its use as an income shelter and for prevailing tax benefits, appear the most logical explanation for this phenomenon. Concurrently, the supply of rental housing was constrained by various factors--such as rent control in some cities and potential rent control in others--which made private investment more risky than in other periods. It is interesting to note, though, that housing permits for five or more unit structures in late 1979 were higher than in recent periods. Apartments, constituted more than 40 percent of all units in New York, Pennsylvania, Massachusetts, Texas and Arizona (See Table IV-3A). However, it is premature to determine if these increases are part of a long-term pattern which reverses the 1970-1976 trend of lower apartment construction rates (See Table IV-3B).

Housing demand by type for the 1980s is difficult to predict because of divergent pressures. Based on demographic characteristics alone, specifically the continuing decline in family household size and increases in non-

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[1] The price of housing between 1970 and 1977 in constant dollars increased by 5.3 percent, while the median income of homeowners in metropolitan areas actually declined marginally as noted in Part III of this report.

Table IV-3A

NUMBER OF HOUSING PERMITS FOR SELECTED STATES BY TYPE
SEPTEMBER 1979

(In thousands)

State	% U.S. Pop.	Total Permits	% of U.S. Total	One Unit	Five or More Units	% One Unit of Total	% Five or More of Total
U.S.	100.0%	140.0	100.0%	28.5	49.5	56%	36%
New York	8.3	3.9	2.8	1.9	1.8	54	46
Ohio	5.0	4.5	3.2	2.2	1.8	49	39
Penn.	5.5	5.2	3.8	2.7	2.3	52	44
Mass.	2.7	2.5	1.8	0.9	1.5	36	60
Florida	3.9	13.7	9.8	7.1	4.9	52	35
Texas	5.9	11.8	8.4	6.4	4.7	54	40
Arizona	1.1	4.4	3.2	2.2	2.0	50	46
California	10.1	11.8	12.0	9.6	5.1	54	30
Colorado	1.2	3.0	2.2	2.3	0.5	77	19

Table IV-3B

PERCENT PRIVATE MULTIPLE FAMILY HOUSING STARTS
TOTAL STATES BY REGION 1970-1977

	1970	1974	1977
U.S.	43%	34%	27%
Northeast	60	35	37
North Central	38	29	28
South	28	34	26
West	40	38	31

Source: U.S. Bureau of the Census, Construction Reports.

family households, an increasing demand for small, higher desnsity, relatively inexpensive units should be anticipated. In addition, marginal increases in real income projected for the 1980s would prevent many households from allocating a higher share of their disposable income for housing without substantially curtailing outlays for such items as apparel. These economic pressures, however, could be offset by projections of high inflation (which make real estate a sound investment) and the growth of two worker households. Consideration of these compensating factors means that the demand pattern in the 1980s should not deviate sharply from that of the 1970s. One unknown factor is the effect on housing location of the availability and price of fuel. It is evident that the demand for housing near mass transit facilities will rise and that this type of housing, due to high land prices, will be primarily in the form of multi-unit structures. However, given limited new mass transit facilities, the additional demand generated by these factors should be numerically insignificant.

Housing Demand by Region and Metropolitan Location

Housing demand should remain concentrated in the South and West. Currently, three states--Florida, California and Texas--account for over 30 percent of all new housing starts, although only 20 percent of the population resides in these states. New York, Pennsylvania, and Ohio, the residence of one fifth of the population, account for less than ten percent of recent housing starts. These regional patterns reflect differences in the rate of new job formation, growth in personal income, and net inmigration--a pattern likely to continue during the 1980s. Low demand in the Northeast is reflected in the price of new single-family units sold; prices increased by 57 percent between 1970 and 1978 compared to 112 percent in the West.

Central city housing demand will rise above the level of the 1970s as a result of both smaller household size which will add new households to most large urban jurisdictions and the need to replace aging units. The demand for new suburban units should be close to the level of the 1970s.

Demand by Population Class

Based on overall economic growth and income projections for the 1980s, the number of households below the poverty line and the number of households earning less than $12,000 (in 1978 dollars) is likely to increase, although their share of the total population should remain stable. Demand for housing among the elderly will also rise as the number of 65 and over households increases. The demand for subsidized housing among this group will be particularly strong in northeastern states where the proportion of elderly exceeds that of other regions. As the number of female-headed households increases, some form of subsidy will be required. Based on current eligibility standards, the number of households requiring implicit or explicit housing subsidies will generally rise above the level of the 1970s as the number of moderate income families rises.

Nonmetropolitan Growth

Despite rising energy costs, above average growth in rural areas in close proximity to the urban core continued unabated during the 1970s as did housing construction. For example, new housing construction in the rural areas of the Twin Cities (Minneapolis-St. Paul) Region between 1970 and 1979 outpaced the rate of growth in the newer, developing suburbs. The number of housing units in rural areas of the Twin Cities Region increased by 68 percent in nine years, and the population by 54 percent.[1] Rural growth in Minnesota, the outer suburbs of Washington, D.C., and other areas of the nation near the periphery of urban areas is continuing at rates faster than projected. The demand for new housing in these areas is likely to continue, altough at a slower rate, even in the face of rising energy costs. This pattern reflects, in part, nearly completed highway networks, increased employment in rural areas, and the preference of some families for a rural lifestyle.

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[1] Metropolitan Council Monitor, "Rural Growth Surge Raises Knotty Question," December 7, 1979.

2. Public Services

Projected demographic and economic changes will affect the demand for local and state public services in general as well as the required level of federal assistance. This section discusses only selected services which require high levels of outlays and are particularly sensitive to demographic changes. These services include public schools, higher education, police protection, and selected social services such as medical assistance for the elderly, day care, and welfare. The first group of services is considered since they require the largest share of all locally raised tax revenue. Social services are discussed secondly as a substantial rise in these costs would mean fewer direct federal dollars available to distressed cities and suburbs, particularly since current federal taxes as a percentage of income are projected to remain stable or increase only slightly. Indeed, the modest increases in personal income will place severe constraints on total federal revenue available for various programs. For example, as shown in this section, it is projected that medical costs will absorb 20 percent of all outlays by all levels of government--local, state, and federal. Such increases for any one service, combined with potentially rising defense outlays, could reduce federal funds flowing to cites and thus adversely affect the well-being of urban centers.

Federal assistance to local governments, particularly cities, increased sharply during the 1970s. This assistance and programs such as CETA enabled cities under fiscal distress to maintain reasonable levels of public service. While it is not feasible to project the level of federal assistance during the 1980s, it is apparent that federal agencies will have to increase expenditures for health programs, particularly for the growing number of elderly as noted above; for day care centers as a result of more women entering the work force; for the rise in welfare recipients; and for vocational training to increase productivity among the 17 or so million new workers during the 1980s.

Recent and Projected Local-State Expenditure Trends

Per capita local and state outlays for public services increased by 25 percent between 1970 and 1977 (in constant dollars), outpacing the growth in state and local personal income. Outlays as a percentage of personal income therefore increased from 16.6 percent to 18.0 percent during the seven year period. As shown in Table IV-4, increases were the most rapid in health (79 percent), parks and recreation (64 percent), sanitation (63 percent), and debt repayment (53 percent). Outlays for roads actually decreased, while public schools, higher education, and fire protection were responsible for relatively modest increases. Despite the moderate increases in educational outlays, schools remained the largest component of the local and state budget. In 1977, education accounted for almost 40 cents of every dollar spent at the local and state level. Welfare surpassed highways as the second largest service outlay during the 1970s, with health care (including hospitals) and highway outlays now ranking third.

If current trends were to continue into the 1980s, state and local outlays would outpace per capita income growth and account for over 20 percent of all

Table IV-4
PER CAPITA OUTLAYS BY SERVICE--
LOCAL AND STATE GOVERNMENT

	1957	1972	1957	1972	1977	Percent Change 1957-1977	1957 Outlays (1977 Dollars)	Percent Change 1957-1977 (1977 Dollars)
			(Current Dollars)					
Local Schools	$ 68	$ 95	$ 139	$ 224	$ 331	387%	$146	127%
Higher Education	13	22	45	76	120	823	28	329
Highways	46	56	70	91	107	133	99	34
Public Welfare	20	27	41	101	159	695	43	270
Health & Hosp.	18	23	34	63	106	489	39	62
Police Protection	9	11	15	29	48	433	19	153
Fire Protection	5	6	8	12	20	400	11	82
Sanitation	8	11	13	23	44	450	17	159
Parks & Recreation	4	5	7	11	23	475	9	156
Interest on Debt	6	11	15	29	52	767	13	300

Source: 1977 Census of Government

personal income. Given only modest rates of total income growth and resistance to higher taxes at the local level, this percentage appears somewhat high. State and local outlays should not outpace growth in the GNP for most services, although outlays for health and welfare are likely to exceed increases for other services and the projected growth rate. Therefore, during the 1980s local and state outlays should increase modestly as a share of personal income to an average level of about 19 percent, a rate slightly below the trend line.

Public Schools

Based on estimates by the National Center for Educational Statistics, elementary and secondary enrollment is expected to decline by over 4 million students, or by 10 percent, between 1977 and 1987 (See Table IV-5). For lower elementary grades, enrollment depends on a set of birth rate assumptions which constitute each Census alternative. (The results shown are based on Series II-A). There is no doubt, however, that public school enrollment, even assuming a rise in the birth rate, will be reduced by close to 10 percent during the 1980s, with most of the decreases occurring in grades 8 through 12. These enrollment changes are consistent with demographic changes discussed in Part I of this report.

Despite these declines, total outlays are projected by the Center to increase by $17 billion (in constant 1977 dollars) based on rising per pupil education costs during the 1970s. There is some question, however, whether these projected cost increases can be borne by local and state government without higher taxes. During the 1970s, one cause for rising educational outlays was the host of federally and state mandated requirements for special programs, particularly for the handicapped, and diseconomies faced by large urban school districts with enrollment losses. Despite new mandates, the

Table IV-5

ENROLLMENT IN PUBLIC SCHOOL SYSTEMS
1963-1986 (In millions)

School Year	Elementary K-8	Secondary 9-12	Higher Education (Public)
1964	29.3	10.9	3.1
1970	32.6*	13.0	5.9
1977	30.0	14.3*	8.6
1981	27.9	13.2	9.9 (9.3)**
1987	28.4 (25.4)**	11.8	10.6 (9.0)**

* Peak Year

** Low alternative projection

Source: National Center for Education Statistics, Projections of Education Statistics, 1978.

federal share of public school outlays nationally remained stable during the decade, after almost doubling during the 1960s.

Enrollment in large distressed cities declined by 11.2 percent between 1972 and 1976, a level that exceeded the rate of population decline for these same cities. Although enrollment was reduced, the number of teachers increased by 8 percent.[1] In fact, enrollment continued to decline in distressed cities between 1976 and 1978. Thus the total decline between 1970 and 1978 averaged -19.2 percent. During the 1980s, school enrollment in distressed and most other large cities should continue to decline, but at lower levels, compared to the 1970s for two reasons:

- Most families with school-age children who prefer suburban or private schools have already left either the city or public school system.
- Minority birth rates, which will remain relatively high, will result in more children entering lower grades, which would offset some of the loss from white families leaving the city.

However, the number of handicapped children receiving special education is on the rise, meaning that costs per pupil will continue to increase. Despite reduced enrollment, education outlays will remain a large part of the distressed city budget.

Cities with strong economies also registered rapid decreases in school enrollment, although in most instances the population was growing. This pattern is consistent with aggregate data that show the rapid outmigration of families with children from central cities. Even in light of enrollment losses, operating outlays for public schools in non-distressed cities also increased although somewhat more slowly compared to those jurisdictions categorized as distressed.

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[1] Thomas Muller, "Financing Education and Police Services," in Harrington Bryce, ed., Revitalizing Cities, 1979.

Higher Education

Although the National Center anticipates continuing growth in enrollment at the higher education level, the projected growth may not materialize. While total enrollment in the late 1970s stabilized, the reduction in the 18-24 population group by several million during the 1980s suggests that the potential number of students will be smaller. It is probable, however, that public higher education institutions which typically charge low tuition because of state subsidies will experience continued growth while many private schools will have to struggle to maintain their current enrollment levels. Given projected slow rates of economic growth, federally supported loan and grant programs will require expansion to provide educational opportunities for lower income groups.

Police Protection

At the national level, the demand for police services grew rapidly during the 1970s as a result of crime increases and the growth in automobile traffic. Demographic changes, however, had a relatively minor impact on the crime rate increases during the decade, although the number of persons most likely to commit crimes--those aged 14 through 24--grew. Between 1972 and 1978, all crimes nationally increased by an average annual rate of close to 12 percent, and violent crimes increased by over 3 percent annually. If crime rates for each population group remain at their 1977 levels, serious crime should increase by 5 percent between 1977 and 1990, a period during which the population will likely increase by 12 percent. Thus, crime *per capita* should be reduced by about 6 percent, holding all factors other than age distribution constant.

While violent crime increased in all areas, such rural states as Maine, Utah, Vermont and West Virginia experienced substantially lower crime rates compared to more densely populated states. At the regional level, violent crimes increased _twice_ as rapidly in the South and West compared to northern states. In fact, the projected population increases in the South and West suggest that crime rates are likely to continue rising in these regions compared to the northern states. Further, an examination of per capita outlays for police services indicates that outlays have been rising more rapidly in growing regions than in other parts of the nation.

While distressed cities showed somewhat higher crime rates than growing cities, the differences narrowed substantially between 1970 and 1978, with the majority of distressed cities showing reduced crime levels (see Table IV-6). By contrast, most growing cities registered per capita increases in crime. Thus, concern among private sector investors over crime rates in distressed cities should abate during the 1980s. Crime in small cities and rural areas also increased faster than in large cities.[1] However, crime rates in large urban areas remained above those in smaller jurisdictions.

Health Care

Public health care expenditures are certain to be affected by demographic changes taking place now and during the next decade. Of particular relevance will be the greater number of elderly in the population, since approximately two-thirds of their health care bill is paid for by public funds.

In fiscal 1977 the United States spent $142.6 billion for personal health care.[2] Of this total, 13 percent was expended for those under 19 years of age, 59 percent for those aged 19-64, and 29 percent for those 65 years and

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[1] For additional discussion of crime in growing and declining cities see Thomas Muller, "Service Costs in Declining Cities" in _How Cities Can Grow Old Gracefully_, Committee on Banking Finance and Urban Affairs, U.S. House of Representatives, December 1977.

[2] U.S. Department of HEW, _Social Security Bulletin_, January 1979.

Table IV-6

POLICE SERVICE AND CRIME RATES--GROWING AND DISTRESSED CITIES 1970-1977

City Type	N	Number Offenses/ 1,000 Population 1970	Number Offenses/ 1,000 Population 1977	% Change 1970-1977	Police/1,000 Population 1970	Police/1,000 Population 1977	% Change 1970-1977	Number Offenses Police Personnel 1970	Number Offenses Police Personnel 1977	% Changes 1970-1977
Highest crime rate	1	53.3	117.5	120.5	1.8	2.2	22.2	29.6	46.2	56.1
Lowest crime rate	1	29.3	39.2	33.8	1.2	1.6	33.3	23.8	24.7	38.0
Mean (25 cities)	25	35.7	75.2	129.3	1.7	2.1	20.7	20.6	36.9	91.7
Highest crime rate	1	58.9	132.3	124.6	3.4	3.8	11.8	17.4	35.1	102.0
Lowest crime rate	1	45.6	36.2	- 19.5	2.7	2.8	3.7	17.9	11.0	- 35.3
Mean (25 cities)	25	53.2	84.0	57.9	3.4	3.7	13.5	16.6	25.1	59.5

Source: Federal Bureau of Investigation, Crime in the U.S. 1970 and 1977.

older. The average per capita expenditure was $253 for the youngest group, $661 for the middle group, and $1,745 for the elderly. Table IV-7 shows how both aggregate and per capita expenditures have increased over the six year period 1971 through 1977. Aggregate expenditures (in 1977 dollars) for all persons rose by nearly 50 percent during this period, with the largest increase attributable to persons in the 19-64 age group. Per capita expenditures likewise increased but less sharply: 38 percent for all age groups. As might be expected, the elderly were responsible for the largest per capita increase.

As shown in Table IV-7, public funds are financing a growing share of the total health care bill for all persons. This share has grown from 36 percent to 40 percent of the total bill during the 1971-1977 period. The elderly consumed nearly half of all public health care funds, although they represented only 8.5 percent of the total population. This seeming disproportion results from the high per capita costs for the elderly and the fact that more than two-thirds of this cost is met by public funds.

Several trends are thus evident: aggregate and per capita health expenditures are rising; costs are rising most rapidly for the elderly; the proportion of total cost paid for by public funds is increasing; and public expenditures for health care are growing at a rate nearly double that of private expenditures. The causes of the rapidly increasing health care bill are many and complex, but can be briefly traced to three factors: medical care itself is becoming more expensive; more people require this care every year; and those who require the most care are among the most rapidly growing segments of the population.

The future of health care expenditures and particularly public expenditures is highly uncertain in the environment of heated debate about and the proliferation of proposed legislation for some form of comprehensive health

Table IV-7

HEALTH CARE EXPENDITURES BY AGE GROUP FOR SELECTED YEARS

(1977 Dollars)

	1971				1973				1975				1977				Percent Change 1971-1977			
AGGREGATE ($ billions)	All Ages	Under 19	19-64	65+	All Ages	Under 19	19-64	65+	All Ages	Under 19	19-64	65+	All Ages	Under 19	19-64	65+	All Ages	Under 19	19-64	65+
Total *	$98	16	56	26	$112	17	62	33	$124	16	73	35	$143	18	83	41	46%	13	48	58
Private	63	12	42	9	71	12	45	13	74	11	51	12	86	12	59	14	37	0	40	55
Public	35	4	14	17	41	5	17	19	50	5	22	23	57	6	24	28	63	50	71	65
%Public of Total	36%	25%	25%	65%	37%	29%	27%	58%	40%	31%	30%	66%	40%	33%	30%	68%	11	32	20	5
PER CAPITA																				
Total*	$467	212	487	1280	$522	230	525	1523	$571	220	601	1558	$646	253	661	1745	38%	19	36	36
Private	302	158	368	456	330	164	385	615	339	148	422	515	387	175	471	576	28	11	28	26
Public	165	54	119	825	192	66	140	908	232	72	179	1043	259	78	190	1169	57	44	60	42

*May not equal sum of public and private due to rounding.

Source: U.S. Department of HEW, Social Security Bulletin, various issues.

insurance. Since it is not the intent of this paper to anticipate all changes which could affect the cost of medical care and the level of public support, the projections shown in Table IV-8 are limited to cost increases resulting from population increases and per capita outlays based on trends during the 1970s. The projections are based on the assumptions that the rate of public support of medical care will not change and that the per capita demand for medical services will follow earlier trends. As shown in Table IV-8, medical outlays as a share of the GNP can be expected to rise by almost 50 percent during the 1980s, and public medical outlays as a share of all public outlays should rise by more than 43 percent. Health care costs, based on population increases alone, would rise to $165 billion by 1990, an increase of approximately 15 percent. However, Table IV-8 illustrates that if population and per capita cost increases are taken into account, total costs would more than double by 1990, reaching a level of $312 billion. The public cost in 1990 would be $124 billion.[1]

The state and local share of public health care expenditures has declined from 33 percent in 1971 to 31 percent in both 1977 and 1978. If the 31 percent level is held constant through 1990, the costs to the lower tiers of government would be slightly more than $38 billion. However, costs are likely to be different if political and demographic factors are considered. For example, the elderly consume only a very small portion of state and local health care money--in 1977 only 15 percent of the public bill for the elderly was funded through state and local programs. Approximately one half of this money is for nursing home care. Persons aged 19 through 64 consume the largest amount of state and local money both in absolute terms and as a

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[1] This should be considered a conservative estimate, since the public sector share is likely to rise, particularly for the elderly.

Table IV-8

CHANGES IN MEDICAL OUTLAYS BASED ON CHANGES IN POPULATION AND 1971-1977 TRENDS IN PER CAPITA OUTLAYS[a]

(In billion 1977 dollars)

	1977[d]	1980	1985	1990	% Change 1977-1990
Total[a]	$143	170	231	312	118.0
Private	86	102	139	188	118.0
Public[b]	57	68	92	124	118.0
GNP	$1,887	2,121	2,465	2,771	46.8
Total Medical as Percent of GNP	7.5%	8.0	9.4	11.2	49.3
Public Outlays[c]	394.0	445.0	530.0	595.8	51.2
Public Medical as Percent of All Public Outlays	14.5	15.3	17.3	20.8	43.4

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a. Based on Series II population projections and a 5 percent annual increase in outlays per capita (based on 1971-1977 trend).

b. The rate of public support is held constant at the 1977 level of 39.8%

c. All government purchases of goods and services.

d. Expenditures shown for 1977 are considerably lower than expenditures shown in Table 143 of the 1979 Statistical Abstract of the United States. These data show 1977 outlays to be $97 million private and $64 million public. Outlays as a percentage of GNP are shown as 9.1 percent in 1978.

Source: Table IV-7.

proportion of total expenditures per age group throughout the six year period.

Day Care

The need for day care services is highly dependent on certain demographic factors discussed elsewhere in this paper, including an absolute growth in the number of young children, the rapid growth of single parent households, and increasingly high labor force participation rates for women. Indeed, it is estimated that by 1990 nearly 45 percent of children under age six will have mothers in the labor force.[1]

Since a child's mother generally serves as its primary caretaker, the number of young children with working mothers is a good indicator of the need for child care services. A recent Urban Institute publication on women in the labor force notes that while the number of children decreased by nearly 13 percent between 1970 and 1977, the number of such children with mothers in the labor force increased by 15 percent.[2] The same study points out that by 1990 the number of these children could rise by an additional 63 percent over 1977 levels; thus, in 1990 there may be 10.5 million children in need of day care services.[3] Currently there are an estimated 6 million children under age six whose mothers are in the workforce, and the best estimate available indicates that only 900,000 children were enrolled in day care centers in 1977, excluding Headstart.[4] However, the number of children receiving all varieties of service is unknown.

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[1] Ralph Smith (editor), The Subtle Revolution, The Urban Institute, 1979, p. 133.

[2] Ibid.

[3] This number results from multiplying the Census Bureaus Series II projections of the number of children under age 6 by the projected percentage of children with working mothers.

[4] Day Care Division, HEW.

The number of young children with working mothers is not, however, a relevant expression of needed public outlays since the role of the federal government is currently more or less limited to the provision of services to low, and, more recently, moderate income families. Briefly, child care services are provided under the AFDC, WIN and Headstart programs. Indirect services are provided in the form of tax credits for work-related child care expenses. Table IV-9 details federal outlays under these and other programs. In fiscal 1974 the federal government spent an estimated $1.2 billion directly on what can be broadly defined as child care services,[1] increasing the amount to $2.5 billion in 1977.[2]

What is known about day care is, unfortunately, only a patchwork of information, but a brief outline can be made. In 1977 there were 6.4 million children under age six with mothers in the labor force. Of this total, an estimated 1.4 million[3] children or 22 percent received federally subsidized day care through major programs at a cost of $1,055 per child.[4] By 1900 there are projected to be 10.5 million children in need of day care. Assuming that both the proportion of children receiving federally subsidized care and the cost per child remain constant, federal costs are likely to increase by 71 percent to $2.4 billion based only on the number of children. These projections are, of course, likely to be exceeded in reality since they do

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[1] U.S. Senate, Child Care Data and Materials, Committee on Finance, October 1974, p. 23.

[2] Ralph Smith, Ibid., p. 141.

[Note: It cannot be determined whether the increase over 1974 levels is a result of new programs or expansion of existing programs since neither source contains useful breakdowns by program.]

[3] This figure represents only the sum of the Title XX, Headstart and WIN programs.

[4] This figure is the percentage of children in the three programs of all children with working mothers.

Table IV-9
MAJOR FEDERAL CHILD CARE PROGRAMS

PROGRAM	FY 1974 Federal Total (Millions)	FY 1974 No. Children Served (Thousands)	FY 1974 Federal Outlay Per Child	FY 1977 Federal Total (Millions)	FY 1977 No. Children Served (Thousands)	FY 1977 Federal Outlay Per Child
DIRECT						
*Title XX	$549	$726	$ 756	$949	$944	$1028
Headstart	392	379	1028	448	349	1284
WIN	45	75	597	57	85	670
Food Service	43	278	156	119	580	206
	944	1258	750	1573	1958	803
SUBTOTAL						
Other	NA	NA	NA	99	466	212
INDIRECT						
Tax Deduction/ Credit	209	NA	NA	500	4000	125
TOTAL	$1153	NA	NA	$2172	$6424	$ 338

* Title XX incorporates 2 AFDC programs which were part of Title IV in 1974. Therefore the 1974 Title XX figure actually refers to the AFDC programs.

Source: U.S. Senate Committee on Finance, Child Care Data and Materials, October 1974, pp. 71-72 and U.S. Dept. Labor "Child Care Arrangements of Working Mothers," Monthly Labor Review, October 1979.

not take into account higher levels of public support, new programs, and the like.

The cost to state and local government of child care programs is likely to increase at the same rate, although the expenditure level will be much less since the overwhelming proportion of public support for day care is federal. For example, in 1974 the federal government assumed 72 percent of the cost of the AFDC program and 90 percent of the cost of WIN. Total state contributions to all federally supported child care programs were only $338 million in 1974.[1]

Aid to Families with Dependent Children (AFDC)

The history of the AFDC program shows no obvious trend toward either cost increases or decreases. Caseloads and, therefore, costs fluctuate yearly and reflect both economic conditions and demographic changes. The AFDC program is particularly sensitive to changes in birth, marriage, and divorce rates. For example, every time a child is born to an unmarried female, or every time a couple with dependent children is divorced, a "high risk" situation is created.

There is more than one way to measure the size of the AFDC program. While the number of families receiving benefits is one way to observe growth or shrinkage over time, the incidence of need is not proportionately related to yearly changes in the cost of the program since payment levels are partially dependent on state formulas for determining family eligibility. Further, state standards of need and methods of calculating benefits vary widely by state. Therefore, total annual payments, another measure of program growth, reflect both the discration of states as well as the number of people in need.

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[1] U.S. Senate, Child Care Data and Materials, October 1974, p. 77.

The rate of increase in the number of individuals receiving benefits was considerably lower in the 1970s than during the previous decade, and there was, in fact, an absolute decline between 1975 and 1978. As shown in Table IV-10, the number of recipients increased throughout the 1960s by 214 percent but grew by only 9 percent between 1970 and 1978.[1] The rates of increase in both the number of families and total annual payments show fairly similar patterns although total payments decreased only twice during the 18 year period shown. These fluctuations reflect changes in the political climate, the rate of economic growth, and program regulations.

An earlier Urban Institute study analyzed the effect of demographic change on the AFDC program in order to project the size and cost of the program through 1985.[2] The major analytical tool used was DYNASIM (dynamic simulation of income model) which incorporates current economic and demographic trends and forecasts their implications for the future. The demographic factors incorporated into the model were birth, death, marriage, divorce, education, and mobility, all of which yielded the age, race, sex, educational, and regional distribution of a simulated population. The base run used conservative assumptions: rates of birth, marriage and divorce were assumed to remain constant after 1977; female labor force participation was assumed to increase; the unemployment and inflation rates were held at 5 percent and 4 percent, respectively. Extreme conditions were also simulated to determine the range of effects. Ten forecasts were made based on unique configurations of assumptions. The study concluded that growth in the number of AFDC families

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[1] U.S. Department of HEW, Social Security Bulletin, June 1979, pp. 55-56.

[2] Wertheimer and Zedlewski, The Impact of Demographic Change on the Distribution of Earned Income and the AFDC Program, 1975-1985, The Urban Institute, December 1976.

Table IV-10

AFDC PAYMENTS 1960-1978
(In Thousands of 1977 dollars)

Year	No. Children	No. Families	No. Recipients	Average Monthly Payment-Families	Average Monthly Payment-Recipient	Total Annual Payments
1960	2,370	803	3,073	$222.12	$58.12	$2,038,571
1965	3,316	1,054	4,396	$262.94	$63.07	$3,156.664
1970	7,033	2,552	9,659	$297.02	$78.47	$7,577,198
1971	NA	NA	NA	NA	NA	$9,283,366
1972	7,968	3,123	11,069	$278.04	$78.44	$10,178,450
1973	7,813	3,156	10,815	$265.47	$77.45	$9,917,018
1974	7,901	3,323	11,022	$262.24	$79.66	$9,828,668
1975	8,105	3,556	11,402	$256.41	$80.19	$10,470,733
1976	7,903	3,585	11,203	$256,25	$81.99	$10,748,845
*1977	7,572	3,547	10,780	$250.43	$82.40	$10.602,611
1978	7,389	3,515	10,550	**$254.61	**$84.84	**$10,739,652
% Change 1960-1965	39.9%	31.2%	43.0%	18.4%	8.5%	54.8%
1965-1970	120.1%	142.0%	120.0%	13.0%	24.4%	140.0%
1970-1975	15.2%	39.3%	18.0%	-13.7%	2.3%	38.2%
1975-1978	-8.8%	-1.2%	-7.5%	-0.7%	5.8%	2.6%

*December 1977
**1978 Dollars

Source: U.S. Department of HEW, Social Security Bulletin, June 1979 Tables M-32, M-33.

will be significantly related to the birth, marriage, and divorce rates of the present and next several years, with changes in the divorce rate showing the highest correlation to changes in the AFDC caseload.

Low marriage rates tend to increase the probability for growth in the AFDC caseload by increasing the chances for births out of wedlock. However, since low marriage rates also mean a reduction in the absolute number of divorces which can occur, there is also a decreased chance for a female-headed family to result from marital dissolution. The net effect of low marriage rates is an expected increase in the AFDC caseload. The study projected that low birth rates would result in an average -5.1 percent change in the AFDC caseload from the base run between the years 1975 and 1985, while a high birthrate would increase the caseload from the base run by an average of 6.2 percent during those years. The divorce rate, under the low rate assumption, was expected to reduce the caseload by an average of 8.3 percent during the ten year period, and, under the high rate assumption, increase it by an average of 8.8 percent.

Overall, the study projected no clear growth trend between 1975 and 1980 since birth, marriage and divorce rates would tend to offset each other. This prediction appears to be consistent with the most recent data which indicate a modest decline in the number of recipients between 1975 and 1978 and a one percent decrease in the number of families. The model, however, does project a 15 percent caseload increase between 1980 and 1985 as a result of the both previously steady increase in the number of births and the larger number of divorces due to the assumed increase in marriages between 1975 and 1985.

Applying the projected 15 percent increase in caseload, the 1985 costs can be forecast. Table IV-10 shows that the per family AFDC costs in constant dollars have remained virtually the same over a ten year period. A 15 percent caseload increase would yield a total of just over 4 million families by 1985. If the 10 year average of $260 per family per month is applied to the approximately 4 million families, the total annual payments would reach $12.6 billion by 1985, or 2.4 percent of all government outlays for goods and services.

3. Economic Development

The rate of economic development in a given area is affected by demographic as well as economic factors, both national and international. As noted in earlier sections of this report, the distribution of economic development in the 1980s is expected to be uneven. At the metropolitan level, growth is projected to be concentrated at the periphery of urbanized areas while the southwestern and western states will be the major regions of economic expansion.

Economic development strategies in older central cities are difficult to develop because much of the comparative economic advantage these cities enjoyed in the pre-World War II period has been eroding. Among the factors detracting from central city economic development are: the availability of relatively inexpensive land accessible to major highway networks outside the urban core, lower personal and business taxes in outer suburban and nonmetropolitan areas, and technological changes which make central city locations for many industries less desirable than they were previously.

From an economic development perspective, demographic changes projected for the 1980s are not likely to produce significant benefits for central cities, although there are exceptions. For example, the declining number of persons under age twenty should dampen the demand for public services and reduce violent crimes. With more older households expected to remain in central cities, associatedd public sector costs will vw borne by state and federal agencies.

One problem older central cities will likely confront is a substantial increase in the number of young adults, particularly minorities, whose education levels and job experience during their teens in the 1970s was limited. Unless training and employment opportunities can be provided for this generation, cities could face substantial social problems with adverse economic consequences.

One of the major limits to economic growth in cities during the 1970s was the low level of capital investment, particularly in manufacturing, but in other sectors as well. In particular, capital investment per manufacturing employer in distressed cities was low,[1] while sharp declines in manufacturing employment were realized. Total per capita industrial and commercial construction activity in distressed urban areas has also been low. It is evident, therefore, that additional capital investment in both residential and non-residential sectors will be required. Non-residential capital investment in some older central cities, notably New York City and Chicago, increased during the late 1970s; however, this activity did not carry over to many other distressed cities.[2]

One limitation to a resurgence of private capital investment in the 1970s is the perspective of many business leaders toward investment in distressed cities. An extensive survey which included 1300 business executives and managers with firms located in ten central cities during 1979 listed perceived problems in their jurisdictions.[3] Distressed cities were consistently ranked low because of high personal and business taxes and a perceived low quality of public services, primarily schools, and negative attitudes toward the private sector. The same survey shows that cities with strong economies enjoyed a positive business image. It is evident that unless the perceptions of individuals making investment decisions regarding our distressed cities become more positive, new employment opportunities in these cities will remain limited.

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[1] Thomas Muller, "Venture Capital and Central City Job Decline," U.S. Department of Commerce Urban Roundtable, October 1977.

[2] Joint Economic Committee, "Central City Businesses--Plans and Problems," February 1979.

[3] Ibid.

Another issue which is not unique to central cities is low productivity. For example, many manufacturing jobs in older cities are being lost not to their suburbs or other regions but to other nations with higher productivity growth and lower wages. These losses can only be curtailed if labor force productivity can increase as a result of more capital investment and better training for those entering the labor force.

Given conditions discussed above, an economic development strategy for cities must incorporate several needs. Essential is a combination of both increased employment opportunities for young persons with limited training or education and a concurrent expansion of capital investment, both of which can contribute to improving the image of distressed cities. To accomplish both, a combination of private and capital funds will be necessary.

APPENDIX A

Table 1

AVERAGE ANNUAL NUMBER OF TOTAL U.S. MOVERS INTO/OUT OF CENTRAL CITIES BY AGE: 1970-75 (In Millions)[1]

Age	Average Annual Number Moves Out	Percent Total U.S. Age Group	Average Annual Number Moves In	Percent Total U.S. Age Group	Average Annual Number Net Moves
5-14	-0.58	-1.42%	0.22	0.54%	-0.36
15-19	-0.20	-1.04	0.10	0.52	-0.10
20-24	-0.30	-1.74	0.26	1.52	-0.004
25-34	-0.76	-3.00	0.32	1.26	-0.44
35-44	-0.34	-1.30	0.12	0.44	-0.20
45-64	-0.32	-0.76	0.12	0.28	-0.20
65+	-0.20	-1.00	0.05	0.24	-0.15
Total/Average	-2.66	-1.42	1.18	0.62	-1.48

Source: U.S. Bureau of the Census, Mobility of the Population of the United States March 1970 to March 1975, P-20, No. 285, October 1975.

AVERAGE ANNUAL NUMBER OF MOVERS INTO/OUT OF CENTRAL CITIES BY AGE: 1975-78 (In Millions)[1]

Age	Average Annual Number Moves Out	Percent Total U.S. Age Group	Average Annual Number Moves In	Percent Total U.S. Age Group	Average Annual Number Net Moves
5-14	-0.60	-1.6%	0.26	0.70%	-0.34
15-19	-0.20	-0.96	0.13	0.63	-0.07
20-24	-0.50	-2.60	0.40	2.10	-0.10
25-34	-1.00	-3.23	0.46	1.50	-0.53
35-44	-0.30	-1.46	0.17	0.73	-0.17
45-64	-0.36	-0.83	0.20	0.46	-0.17
65+	-0.13	-0.60	0.07	0.30	-0.07
Total/Average	-3.13	-1.60	1.70	0.87	-1.43

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1. Excludes movers from abroad.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 2
NET INTER-REGIONAL MIGRATION TOTAL U. S. POPULATION
MARCH 1970-MARCH 1975 (In Thousands)
(population excludes persons under 5 years of age)

Region	Total Inmigration	Total Outmigration	Net Migration	Percent Migration Per Annum[1]
Northeast	1057	-2399	-1342	-0.54
North Central	1731	-2926	-1195	-0.42
South	4082	-2253	1829	0.58
West	2347	-1639	708	0.41

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[1] For regional totals, see Appendix A, Table 6.

Source: U.S. Bureau of the Census, Mobility Status of the Population of the United States March 1970 to March 1975, P-20, No. 285, October 1975.

Table 3

NET INTER-REGIONAL MIGRATION--TOTAL U. S. POPULATION

MARCH 1975-MARCH 1978 (In Thousands)

(population excludes persons under 3 years of age)

Region	Total Inmigration	Total Outmigration	Net Migration	Percent Migration Per Annum[1]
Northeast	876	-1575	-699	-0.47
North Central	1483	-2171	-688	-0.40
South	2881	-1871	1010	0.50
West	1901	-1524	377	0.33

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1. For regional totals, see Appendix A, Table 6.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 4

NET INTER-REGIONAL MIGRATION BY RACE March 1970-March 1975

(in thousands)
(population excludes persons under 5 years of age)

White

	Total Inmigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	920	-2160	-1240	-0.6
North Central	1569	-2714	-1145	-0.4
South	3730	-1939	1791	0.7
West	2155	-1561	594	0.4

Black

	Total Inmigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	118	-182	-64	-0.3
North Central	150	-202	-52	-0.2
South	302	-288	14	0.02
West	153	-51	102	1.2

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[1] For regional totals, see Appendix A, Table 7.

Source: U.S. Bureau of the Census, Mobility of the Population of the United States, March 1970 to March 1975, P-20, No. 285, October 1975.

Table 5

NET INTER-REGIONAL MIGRATION BY RACE--March 1975-March 1978

(In Thousands)

(population excludes persons under 3 years of age)

	White			
	Total Inmigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	792	-1362	-570	-0.4
North Central	1308	-1964	-656	-0.4
South	2573	-1605	968	0.6
West	1670	-1412	258	0.3

	Black			
	Total Inmigration	Total Outmigration	Net Migration	Percent Migration[1] Per Annum
Northeast	61	-176	-115	-0.8
North Central	154	-161	-7	-0.03
South	270	-244	26	0.07
West	181	-85	96	1.6

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1. For regional totals, see Appendix A, Table 7.

Source: U.S. Bureau of the Census, Geographical Mobility: March 1975 to March 1978, P-20, No. 331, November 1978.

Table 6

REGIONAL POPULATION OF THE U.S. 1970 AND 1975

Region	1970	1975
Northeast	49,157	49,456
North Central	56,673	57,636
South	63,032	68,041
West	34,948	37,900

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1977.

Table 7

REGIONAL POPULATION OF THE U.S BY RACE 1970 AND 1975

	White		Black	
Region	1970	1975	1970	1975
Northeast	44,416	44,249	4,346	4,736
North Central	51,717	52,283	4,570	4,926
South	50,492	54,702	11,973	12,815
West	31,533	33,907	1,699	1,959
Total	178,158	185,141	22,589	24,435

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1977.